Preliminary Draft

Phase I Municipal Stormwater NPDES and State Waste Discharge General Permit

May16, 2005

Permit No	
Coverage Date	_

Issuance Date: Effective Date: Expiration Date:

National Pollutant Discharge Elimination System and State Waste Discharge General Permit for Discharges from Large and Medium Municipal Separate Storm Sewer Systems

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY OLYMPIA, WASHINGTON 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Until this permit expires, is modified, or revoked, Permittees that have properly obtained coverage under this permit are authorized to discharge to waters of the state in accordance with the special and general conditions which follow.

Dave Peeler
Water Quality Program Manager
Department of Ecology

TABLE OF CONTENTS

- S1. PERMIT COVERAGE AND PERMITTEES
- S2. AUTHORIZED DISCHARGES
- S3. RESPONSIBILITIES OF PERMITTEES AND CO-PERMITTEES
- S4. TOTAL MAXIMUM DAILY LOAD ALLOCATIONS
- S5. COMPLIANCE WITH STANDARDS
- S6. MONITORING
- S7. STORMWATER MANAGEMENT PROGRAM
- S8. STORMWATER MANAGEMENT PROGRAM FOR CO-PERMITTEES AND SECONDARY PERMITTEES
- **S9. REPORTING REQUIREMENTS**
- G1. DISCHARGE VIOLATIONS
- G2. PROPER OPERATION AND MAINTENANCE
- G3. NOTIFICATION OF SPILL
- G4. BYPASS PROHIBITED
- G5. RIGHT OF ENTRY
- G6. DUTY TO MITIGATE
- G7. PROPERTY RIGHTS
- **G8. COMPLIANCE WITH OTHER LAWS AND STATUTES**
- G9. MONITORING
- G10. REMOVED SUBSTANCES
- G11. SEVERABILITY
- G12. REVOCATION OF COVERAGE
- G13. TRANSFER OF COVERAGE

- G14. GENERAL PERMIT MODIFICATION AND REVOCATION
- G15. REPORTING A CAUSE FOR MODIFICATION OR REVOCATION
- G16. APPEALS
- **G17. PENALTIES**
- G18. DUTY TO REAPPLY
- G19. CERTIFICATION AND SIGNATURE
- **G20. RECORDS RETENTION**

DEFINITIONS AND ACRONYMS¹

APPENDIX 1. Minimum Technical Requirements for New Development and Redevelopment

APPENDIX 2. Determining Construction Site Sediment Transport Potential

APPENDIX 3. Identifying Sites Requiring Source Control Inspections

APPENDIX 4. List of Non-Stormwater Discharges

APPENDIX 5. Notice of Intent (placeholder)

APPENDIX 6. TMDL Requirements

APPENDIX 7. Street Waste Disposal

APPENDIX 8. Annual Report Forms (placeholder)

APPENDIX 9. Summary of Implementation Schedule (placeholder)

¹ Terms that are included in the definitions and acronyms section are indicated in italics the first time they are used in the text of the permit.

[CONVENTION USED FOR COMMENTS AND EDITS]

- All comments are bracketed and shown in bold, underlined font.
- **•** All suggested edits are shown in strikeout and underline format.
- Some comments and edits are tiered to reflect an order of preference for their
- 5 application. Tier 1 comments and edits are first preference, Tier 2 are second
- 6 preference, and so on. All comments and edits are Tier 1 unless otherwise specified.

7 SPECIAL CONDITIONS

1

8

27

28

29

31

S1. PERMIT COVERAGE AND PERMITTEES.

- 9 [Ideally, we would like municipal stormwater permits to be issued by WRIA so that
- the language of S1A would be modified to add a reference to the WRIA covered by
- 11 the permit and S1B would list all the regulated Phase I and Phase II permittees in the
- 12 WRIA. Our next preference would be to have one general permit for all regulated
- 13 western Washington municipalities that requires the development of WRIA-wide,
- rather than jurisdiction by jurisdiction, stormwater management programs
- 15 (SWMPs). This alternative would also require changes to both sections A and B as
- well as S3 and to S7.]
- 17 [King County owns and operates drainage facilities in jurisdictions other than
- 18 unincorporated King County. These facilities are attached to sites usually associated
- 19 with the County's regional services, such as the King County Airport, transfer and
- 20 <u>pump stations, parks, courthouses and detention centers, and park and rides. There</u>
- 21 are currently differing opinions about whether, under the language below, these
- 22 <u>facilities are part of the County's regulated municipal separate storm sewer system</u>
- 23 (MS4), are covered by the permit of the host jurisdiction, are secondary permittees, or
- 24 <u>are not included in any permit. This topic, and its many associated issues, warrants</u>
- 25 further discussion before development of the next draft.]
- A. Permit Coverage Area
 - This permit covers discharges from Large and Medium Municipal Separate Storm Sewer Systems (MS4s) as established at Title 40 CFR 122.26, except for municipal separate storm sewers (MS3s) owned or operated by the Washington State Department
- of Transportation.
- B. The following entities had coverage under a previous municipal *stormwater* permit and
- reapplied for coverage. Their coverage date under this permit begins on the effective
- date of this permit. These entities are covered under this permit as Permittees:
- The City of Seattle
- The City of Tacoma
- 37 King County
- 38 Snohomish County

1			Pierce County
2			Clark County
3 4 5 6 7 8		C.	King County had coverage under a previous municipal stormwater permit, as a <i>Co-Permittee</i> with the City of Seattle, and reapplied for coverage. Their coverage date under this permit begins on the effective date of this permit. King County is covered as a Co-Permittee with the City of Seattle for discharges it owns or operates in the City of Seattle.
9 10		D.	Upon application and coverage in accordance with Special Condition S1.F, the following entities are covered under this permit as Secondary Permittees:
11 12 13 14 15 16 17			 Port of Seattle, excluding Seattle-Tacoma International Airport Port of Tacoma Drainage, diking, flood control, or diking and drainage districts located in the Cities or unincorporated portions of the Counties listed in \$2.AS1.B., above, which own or operate municipal separate storm sewers serving non-agricultural land uses. Other owners or operators of municipal separate storm sewers located in the Cities or unincorporated portions of the Counties listed in \$2.AS1.B., above.
18 19 20		E.	Unless otherwise noted, the term "Permittee" shall include Permittee, Co-Permittee, and Secondary Permittee, as defined above in Special Conditions S1.C and S1.D.
21		F.	Coverage for Secondary Permittees
22 23 24 25 26 27 28			1. In order to obtain coverage under this permit, each secondary Permittee identified under Special Condition S1.D shall submit a <i>Notice of Intent</i> (NOI) and provide public notice of the application for coverage in accordance with WAC 173-226-130. The NOI shall constitute the application for coverage. Ecology will notify applicants in writing of their status concerning coverage under this permit within 90 days of Ecology's receipt of the NOI and demonstration that the public notice requirements have been met.
29			2. NOIs shall be submitted to:
30 31 32 33 34			Department of Ecology Water Quality Program Municipal Stormwater Permit Program P.O. Box 47600 Olympia, WA 98504-7600
35	S2.	ΑŪ	UTHORIZED DISCHARGES.
36 37 38 39		A.	This permit authorizes the discharge of stormwater to surface waters and to ground waters of the state from municipal separate storm sewers owned or operated by each Permittee, Co-Permittee, and Secondary Permittee identified in Special Condition S1 as follows:
40			1 Existing stormwater discharges

1 2. New stormwater discharges constructed after the issuance date of this permit that 2 have received all applicable state and local permits and use authorizations, 3 including compliance with Ch. 43.21C RCW (the State Environmental Policy Act), 4 and that are in compliance with Special Condition S5. COMPLIANCE WITH 5 STANDARDS, of this permit. 6 [***Delete 1 and 2 above consistent with the TIER 1 & 2 versions of Condition 7 S5 comments/edits*** The Clean Water Act provides one standard for the 8 regulation of municipal stormwater discharges: control to reduce pollutants to 9 the maximum extent practicable (MEP). This double standard for existing and new discharges is not consistent with the Clean Water Act.] 10 3. Stormwater discharges to ground waters of the state are covered under this permit, 11 12 except that stormwater discharges to ground waters of the state that are designed to 13 discharge through facilities regulated under the Underground Injection Control 14 (UIC) program, Chapter 173-218 WAC, are not covered under this permit. 15 Stormwater structures that are not specifically designed to discharge directly to the groundwater should be excluded from the UIC program.] 16 17 4. Stormwater discharges to ground waters not in hydraulic continuity with surface 18 water are covered in this permit only under state authorities, Chapter 90.48 RCW, 19 the Water Pollution Control Act. 20 B. This permit authorizes discharges of stormwater associated with industrial and 21 construction activity, process wastewater, and non-stormwater discharges from 22 municipal separate storm sewers owned or operated by the Permittee, to waters of the 23 state, only under the following conditions: 24 1. Non-stormwater discharges and process wastewater must be authorized by another 25 National Pollutant Discharge Elimination (NPDES) permit or identified by and be 26 eliminated in compliance with Special Condition S7.C.8 Illicit Connections and 27 Illicit Discharges Detection and Elimination; or 28 2. Stormwater associated with industrial activity, as defined by 40CFR122.26(b)(14), 29 must be authorized by a separate individual or general NPDES permit, such as the 30 Industrial Stormwater General Permit, Construction Stormwater General Permit, or 31 another General Permit or individual permit issued by the Department. 32 C. This permit authorizes discharges from fire fighting activities, except training exercises, 33 unless the discharges from fire fighting activities are identified as significant sources of 34 pollutants to waters of the State. [Firefighting activities cannot cease if runoff is 35 causing water quality exceedences.] 36 D. This permit does not authorize illicit discharges-except as allowed in Special Condition 37 S7.C.8. Illicit Connections and Illicit Discharges Detection and Elimination [there are 38 no illicit discharges allowed under Special Condition S7.C.8.], nor does it relieve entities-responsible parties [as defined in 173-303 WAC, 173-340 WAC] for illicit 39 40 discharges, including spills of oil or hazardous substances, from responsibilities and 41 liabilities under state and federal laws and regulations pertaining to those discharges.

E. This permit does not authorize discharge of stormwater to a sanitary sewer. Discharge of stormwater to sanitary sewers is prohibited except for stormwater contaminated by industrial activities, or other severely contaminated stormwater, and then only when no other reasonable options exist and only when approved by the local sewer district and/or owners of a Publicly Owned Treatment Work (POTW).

S3. RESPONSIBILITIES OF PERMITTEES, CO-PERMITTEES, AND SECONDARY PERMITTEES

[Our favored approach to municipal SW permitting is for permits to be tailored and issued for each WRIA, or at least for each WRIA that is participating in salmon conservation planning. Our second preference would be one general permit for all Phase I and Phase II MS4's that requires all regulated municipalities within each WRIA, or at least the salmon conservation planning WRIA's, to develop and implement a unified SWMP for municipal stormwater for each of those WRIA's. As a last resort, if it appears that both of those steps are too ambitious to achieve at this time, then we would like to see strong language in both the Phase I and Phase II permits that encourages cooperation within WRIA's. We have inserted alternative wording below that would implement the third preference. We would be happy to work with Ecology on developing the major changes to the permit that would be required for our first and second preferences.]

- A. Each Permittee, Co-Permittee and Secondary Permittee is responsible for compliance with the terms of this permit for the municipal separate storm sewers it owns or operates.
 - 1. Each Permittee is required to comply with all conditions of this permit, except for S8., Stormwater management program for Co-Permittees and Secondary Permittees.
 - 2. Each Co-Permittee and Secondary Permittee is required to comply with all conditions of this permit, except for Special Condition S7., *Stormwater management program for Permittees*.
- B. Permittees, Co-Permittees and Secondary Permittees may rely on another entity to meet one or more of the requirements of this permit, if the other-entityentity [please define], in fact, implements the control measure, and agrees to implement the control measure on the Permittee's behalf. Permittees that are relying on another entity to satisfy one or more or their permit obligations remain responsible for permit compliance if the other entity fails to implement the permit conditions. All regulated municipalities (including those covered under other municipal permits) within the same watershed resource inventory area (WRIA) are encouraged to pool municipal resources and share permit responsibilities for more cost effective implementation of permit requirements and more coordinated protection of watershed water quality. Where permit responsibilities are shared they must be documented as follows:

- 1 1. Permittees and Co-Permittees that are continuing coverage under this permit must 2 submit a statement that describes the permit requirements that will be implemented 3 by other entities. The statement must be signed by all participating entities. There 4 is no deadline for submitting such a statement, provided that this does not alter 5 implementation deadlines. 6 2. Secondary Permittees must submit an NOI that describes which requirements they 7 will implement and identify the entities that will implement the other permit 8 requirements in the area served by the secondary Permittee's MS4. A statement 9 confirming the shared responsibilities, signed all participating entities, must 10 accompany the NOI. Secondary Permittees may amend their NOI, during the term of the permit, to establish, terminate, or amend shared responsibility arrangements, 11 12 provided this does not alter implementation deadlines. 13 C. Unless otherwise noted, all appendices to this permit are incorporated by this 14 reference as if set forth fully within this permit. 15 TOTAL MAXIMUM DAILY LOAD ALLOCATIONS **S4.** 16 A. The following requirements apply if an applicable Total Maximum Daily Load (TMDL) is approved for stormwater discharges from MS4s owned or operated by the 17 Permittee. Applicable TMDLs or applicable TMDL requirements are TMDLs which 18 19 that have been approved by the EPA and for which a Detailed Implementation Plan has 20 been adopted by Ecology on or before the issuance date of this permit, or which have 21 been approved by EPA-prior to the date that the Permittee's application is received by 22 Ecology, which ever is later. All Permittees must be in compliance with applicable 23 TMDL requirements. All regulated municipalities (including those covered under other municipal permits) within the same area covered by a TMDL are encouraged to pool 24 25 municipal resources and share permit responsibilities for more cost effective and 26 coordinated implementation of applicable TMDL requirements. 27 28 B. For TMDLs not listed in Appendix 6 of this permit, which is by this reference as if set forth fully herein, compliance with this permit shall constitute compliance with all 29 30 applicable TMDLs. Permittees shall track actions required by this Permit that are
 - B. For TMDLs not listed in Appendix 6 of this permit, which is by this reference as if set forth fully herein, compliance with this permit shall constitute compliance with all applicable TMDLs. Permittees shall track actions required by this Permit that are relevant to applicable TMDLs within their jurisdiction. Each Permittee shall monitor implementation of actions required to achieve compliance with the TMDL. The status of TMDL implementation must be included as part of the annual reporting requirements submitted to Ecology. Documentation of all relevant actions implemented that affect MS4 discharges to the waterbody segment that is the subject of the TMDL must be included in the annual report

3738

39

31 32

33

34

35

36

- C. For TMDLs and Permittees listed in Appendix 6, listed Permittees shall comply with the TMDL requirements identified in Appendix 6.
- 40 41
- 1. If water quality monitoring is a specific requirement of a TMDL listed in Appendix 6, the Permittee must develop and implement a TMDL monitoring Quality

1 2 3 4	Assurance Project Plan (QAPP). The Permittee shall submit the TMDL QAPP no later than 90 days after the effective date of this permit, unless otherwise specified in Appendix 6. The monitoring plan shall be submitted to the Department in both paper and electronic form and shall include:
5 6	 a. A detailed discussion and description of the goal and objective(s), monitoring (experimental) design, and sampling and analytical methods.
7	b. A list and maps of the selected TMDL monitoring sites.
8 9	c. The frequency of data collection to occur at each station or site and the number and types of precipitation events to be targeted for sampling.
10	d. The method and location(s) of precipitation measuring devices.
11	e. The triggers for automated flow monitoring devices.
12	f. The parameters to be measured, as appropriate for and relevant to the TMDL.
13 14 15	g. The QAPP will be <u>implemented beginning no later than 90 days after receiving review approval from Ecologyimplemented beginning no later than 180 days after the effective date of this permit.</u>
16 17 18 19 20 21	2. For TMDLs listed in Appendix 6, affected Permittees shall include, as part of the Permittee's annual report to the Department, a TMDL Summary Implementation Report. The report shall include the status and actions taken by the Permittee to implement the TMDL. The TMDL Summary Report shall document relevant actions taken by the Permittee that affect MS4 discharges to the waterbody segment that is the subject of the TMDL. The report must also identify the status of any applicable TMDL implementation schedule milestones.
23	
24 25 26 27 28 29 30 31 32	D. For TMDLs that are approved by EPA after this permit is issued, the Department may establish TMDL related permit requirements through future permit modification, administrative orders, or when this permit is reissued. Permittees are encouraged to participate in development of TMDLs within their jurisdiction and to begin implementation. The Department may modify this permit to incorporate requirements from TMDLs completed after the issuance of this permit if the Department determines implementation of actions, monitoring or reporting necessary to demonstrate reasonable further progress toward achieving TMDL waste load allocations, and other targets, are not occurring and must be implemented during the term of this permit.

1	S5.	COMPLIANCE WITH STANDARDS [***TIER 1 version***]
2 3 4		Municipalities regulated under this permit shall protect water quality by using controls that reduce the discharge of pollutants from their municipal storm sewers to the Maximum Extent Practicable. Compliance with the terms of this permit will satisfy this requirement.
5	<u>S5.</u>	COMPLIANCE WITH STANDARDS [***TIER 2 version***]
6 7 8 9 10		In order to meet the goals of the Clean Water Act and address compliance with applicable surface water, ground water and sediment management standards, municipalities regulated under this permit must use controls that reduce the discharge of pollutants from their MS4 to the Maximum Extent Practicable (MEP). Compliance with the terms of this permit will satisfy this requirement.
11	<u>S5.</u>	COMPLIANCE WITH STANDARDS [***TIER 3 version comments/edits***]
12 13 14 15 16 17 18		A.This permit does not authorize a violation of Washington State surface water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC), sediment management standards (chapter 173-204 WAC), or human health-based criteria in the national Toxics Rule (Federal Register, Vol. 57, NO. 246, Dec. 22, 1992, pages 60848-60923). [This statement is unnecessary for the successful implementation of this permit and only serves to complicate compliance and increase liability for the Permittee. Such a statement is not in the current permit.]
19 20 21 22 23 24		B.A. Existing Stormwater Discharges. In order to meet the goals of the Clean Water Act and make progress towards compliance with applicable surface water, ground water and sediment management standards for all existing stormwater discharges, each Permittee is required to use controls to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP). Compliance with the terms of this permit will satisfy this requirement.
25 26		To meet the requirement to reduce the discharge of pollutants to the MEP, each Permittee shall comply with the requirements of this permit.
27 28 29 30 31 32 33		C.B. New Stormwater Discharges. All new stormwater discharges must comply with all applicable surface water, ground water and sediment management standards. New stormwater discharges, authorized or allowed by the Permittee, shall not cause or contribute to a violation of must comply with applicable standards. New stormwater discharges include new stormwater sources and new stormwater outfalls, including all sources contributing to the new stormwater outfall. Compliance with water quality standards shall be determined as follows:
34 35 36 37 38 39 40		1. If the new stormwater discharge is controlled in accordance with the technical standards in Appendix 1 (which is by this reference as if set forth fully herein) or equivalent standards approved by Ecology and in compliance with the terms of this permit, then the discharge is in compliance unless <i>site-specific information</i> as in 2, below, indicates otherwise. From the effective date of this permit until the date the Permittee adopts the technical standards in this permit (or equivalent standards approved by Ecology), including, at a minimum those in Appendix 1, the <i>Best</i>

- based criteria in the national Toxics Rule (Federal Register, Vol. 57, NO. 246, Dec. 22,
 1992, pages 60848-60923).
 - B. Existing Stormwater Discharges. In order to meet the goals of the Clean Water Act and make progress towards compliance with applicable surface water, ground water and sediment management standards for all existing stormwater discharges, each Permittee is required to use controls to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP). Compliance with the terms of this permit will satisfy this requirement.

To meet the requirement to reduce the discharge of pollutants to the MEP, each Permittee shall comply with the requirements of this permit.

- C. New Stormwater Discharges. All new stormwater discharges must comply with all applicable surface water, ground water and sediment management standards. New stormwater discharges, authorized or allowed by the Permittee, shall not cause of contribute to a violation of applicable standards. New stormwater discharges include new stormwater sources and new stormwater outfalls, including all sources contributing to the new stormwater outfall. Compliance with water quality standards shall be determined as follows:
 - 1. If the new stormwater discharge is controlled in accordance with the technical standards in Appendix 1 (which is by this reference as if set forth fully herein) or equivalent standards approved by Ecology and in compliance with the terms of this permit, then the discharge is in compliance unless *site-specific information* as in 2, below, indicates otherwise. From the effective date of this permit until the date the Permittee adopts the technical standards in this permit (or equivalent standards approved by Ecology), including, at a minimum, those in Appendix 1, the *Best management Practices (BMP)* selection and site planning process, types of BMPs and design criteria for BMPs required under S7.C.5 of this permit, each Permittee must provide information to proponents of projects that will result in new stormwater discharges as follows:
 - a. That new stormwater discharges are not allowed to cause or contribute to a violation of applicable surface water, ground water and sediment management standards, including the State's narrative criteria for water quality; and
 - b. That project proponents may apply the technical standards referenced in paragraph S5.C.1, above, as a means of achieving compliance; and
 - c. If project proponents choose not to apply the technical standards referenced in paragraph S5.C.1, above, then they must be prepared to demonstrate that the new stormwater discharge does not cause or contribute a violation of applicable surface water, ground water and sediment management standards. Project proponents must be prepared to document how stormwater BMPs were selected, the pollutant removal expected from the selected BMPs, the technical basis which support the performance claims for the selected BMPs, and an assessment of how the selected BMPs will comply with applicable State water quality standards and satisfy the state requirement under Chapter 90.48 RCW to

 the discharge from the new stormwater source or outfall.

12

13

14

15

16

D. Ecology may modify or revoke and reissue this general permit in accordance with General Condition G14., if Ecology becomes aware of additional control measures, management practices or other actions beyond what is required in this permit, that are necessary to reduce the discharge of pollutants to the MEP or to protect water quality. [This requirement is unnecessary since G14 already addresses it]

controls determined necessary to protect beneficial uses must be in place prior to

17

S6. MONITORING

- 2 [Although we have many concerns with the specific language of this condition, no edits are
- 3 suggested at this time because (1) Ecology has acknowledged in permittee advisory
- 4 meetings that this language needs further significant work, (2) Ecology has committed to
- 5 work with Phase I and II permittee advisory groups to further refine the language before
- 6 the next permit draft, and (3) Ecology should consider the alternative approach
- 7 conceptually described in our comment letter.]

8

1

Ecology is requesting comments on the objectives of the proposed monitoring program.

9

We are interested in assessing the effect of implementing the stormwater management programs required under this permit. This includes looking at receiving waters, stormwater quality and BMP effectiveness. The information gained will be used to provide feedback for local stormwater management programs and Ecology's permitting program.

1112

13

14

Should Ecology require integrated, collaborative, WRIA-scale monitoring programs? WRIA-scale monitoring programs could eventually integrate monitoring among all municipal stormwater permittees, Phase I, Phase II and WSDOT. Or are independent monitoring programs adequate to development the information basis for providing feedback on stormwater management programs?

1516

1718

19

20

21

22

23

24

25

26

27

28

The Permittees, Port of Seattle and Port of Tacoma shall develop and implement a comprehensive long-term monitoring program. The monitoring program shall include two elements: stormwater and receiving water monitoring, and BMP effectiveness monitoring. The monitoring program must include long-term monitoring and may include short term studies. The results of the monitoring program shall be used to support the adaptive management process and lead to refinements of the Stormwater Management Program. The monitoring program must include Quality Assurance Project Plans (QAPPs) for each monitoring objective, written in accordance with Ecology's QAPP guidelines at http://www.ecy.wa.gov/biblio/0403030.html. The monitoring program must be developed by qualified staff or contractors that have experience in applying Ecology's or EPA's OAPP Guidelines.

29

A. Stormwater and Receiving Water Monitoring

30 31 32

33

34

1. The Permittees, Port of Seattle and Port of Tacoma shall develop and implement comprehensive, long-term water quality monitoring program during the term of this permit. The monitoring program shall be designed to contribute to answering the following questions about the effectiveness of the municipal stormwater permitting and program efforts in protecting and restoring water quality and beneficial uses:

1 2 3		a. Is implementation of the Stormwater Management Program preventing impacts from the effects of new development by controlling construction and post-construction <i>runoff</i> ?
4 5		b. Are the Permittees preventing impacts and seeing improvements to beneficial uses by implementing a comprehensive stormwater management program?
6	2.	Monitoring Program Coordination and Planning
7 8 9 10 11		The Permittees and ports may choose to develop the monitoring program, conduct the monitoring, and report results through an integrated, long-term, water quality monitoring program in collaboration with the other Phase I and Phase II MS4 permittees in the Water Resource Inventory Area(s) (WRIA) in which their MS4 is located; or they may independently develop a monitoring program, conduct the monitoring, and report results, in accordance with the requirements, below.
13 14 15 16		If a Permittee chooses to participate in the development of an integrated water quality monitoring program in collaboration with the other Permittees in the WRIA in which their MS4 is located, the collaborative effort shall be conducted as follows:
17 18 19 20 21		a. Permittees that choose to participate in the development of an integrated water quality monitoring program shall form a committee for this purpose. The participating Permittees shall submit a written agreement, signed by all participants, that includes the monitoring program development schedule and responsibilities.
22 23		b. The development and implementation of the integrated monitoring program shall be supported by the combined resources of all the participating Permittees.
24 25 26 27		c. One permittee shall be identified as the lead permittee for purposes of reporting. The lead permittee shall be responsible for the overall monitoring program management and shall prepare and submit to the Department unified monitoring program plans and reports.
28 29		The activities of the lead permittee shall include, but not be limited to, the following:
30 31		 Coordinate and conduct Monitoring Committee meetings on an as needed basis.
32 33		 Coordinate monitoring activities and participate in any subcommittees formed as necessary to coordinate monitoring activities.
34 35		 Provide technical and administrative support and inform the other permittees of the progress of monitoring activities or studies.
36 37		iv. Coordinate all the activities with the Department, including the submittal of all reports and plans developed by the committee.
38		v. Obtain public input for any proposed monitoring plans, where applicable.
39		vi. Cooperate in the WRIA-based monitoring program.

d	imp depa	non-lead permittees on the committee shall be responsible for lementing monitoring programs and coordinating among their internal artments and agencies, as appropriate, to facilitate the implementation of the attoring program.
		activities of the non-lead permittees shall include, but not be limited to, the owing:
	i.	Participate in a Monitoring Committee comprised of the lead permittee and one representative of each of the other permittees. The lead permittee will take the lead role in initiating and developing the WRIA-wide monitoring activities necessary to comply with S6.A above. The committee shall meet on a regular basis (at least six times per year). Each permittee shall designate one official representative to the Monitoring Committee.
	ii.	Review, approve, and comment on all plans, strategies, and monitoring programs, as developed by the lead permittee or any permittee subcommittee to comply with this permit.
	iii.	Conduct and coordinate with the lead permittee any monitoring and characterizations needed to implement the monitoring program.
	iv.	Prepare and submit all required reports to the lead permittee in a timely manner.
		mittees and ports shall support the monitoring planning efforts by providing owing resources and information:
a	. Cour	nties
	i.	Each County shall identify potential monitoring stations in receiving waters and in outfalls associated with those receiving waters, in small subbasins less than ten square miles in area and representing each of the following land uses:
		(1) Medium- to high-density urbanized,
		(2) Areas of new development (urbanizing), and
		(3) Low-density residential basins outside the urban growth boundary.
	ii.	Each County shall provide maps and staff assistance as necessary to facilitate the evaluation and create a list of potential sites, and to determine land uses in the contributing areas.
b	. Citio	es
	i. E	ach City shall identify potential monitoring stations in receiving waters and in outfalls associated with those receiving waters, in small sub-basins less than ten square miles in area and representing each of the following land uses:
	3. T tl a	impledeparents in the following in the f

(1)	High-density urbanized, and
(2)	Medium- to high-density urbanized.
the	ch City shall provide maps and staff assistance as necessary to facilitate evaluation and create a list of potential sites, and to determine land es in the contributing areas.
c. Ports of	Seattle and Tacoma
	ch Port shall identify potential outfalls for water quality/toxicity onitoring stations and in-line sediment traps.
the	ch Port shall provide maps and staff assistance as necessary to facilitate evaluation of potential sites and to determine land uses in the ntributing areas.
this sect informat	condary Permittees will have no responsibilities for monitoring under ion during this permit term, however, they are required to provide tion, maps and access for sampling efforts, as necessary. Other ry Permittees are encouraged to participate in the monitoring program.
among t listed in sedimen	nitoring program shall include confirmed sampling locations distributed he geographical areas covered by the permit and among the land uses 3.a.i. and 3.b.i. above. Each sub-basin selected (except for the in-line t traps at the Ports) must include a receiving water sampling site and nclude a minimum of two outfalls.
Monitoring	Program Development, Review, and Approval
Ecology is r	equesting comments on the question of reviewing and approving the
Should the N	Monitoring Programs be reviewed and approved? If so, what should
be the standa	ard for review? Who is best capable of doing the review? Should an
	entity review the monitoring program? Or should Ecology build up
expertise and	d do the review?
	ve to reviewing and approving the monitoring program is to include
	ed criteria for the monitoring program in the permit. That criteria to be developed before the permit is issued.
.,, 0 0,10 110 0	or or any original and permits in instance.
	ii. Each the use c. Ports of i. Each the cord ii. Each the cord d. Other see this sect informat secondar e. The more among the listed in sedimen should in Monitoring in Monitoring in Should the Monitoring in Should the Monitoring in An alternative more detailed.

2	a.	A detailed discussion and description of the purpose, design, and methods of the water quality monitoring program.
3	b.	A list and maps of all selected receiving water and outfall sampling sites.
4 5 6	c.	The frequency and type of sampling (data collection and analytical methods) or other monitoring effort to occur at each station or site, including but not limited to:
7		i. Sampling in the receiving waters:
8 9		(1) Benthic invertebrates (RIV-PAC, fine sediment and temperature metrics),
10		(2) Embeddedness
11		(3) Temperature
12		(4) pH
13		(5) Hardness
14 15 16 17		ii. Establishing physical conditions and trends in the stream channel. The monitoring program shall develop this strategy using information from "Monitoring Urban Streams: Strategies and Protocols for Humid-Region Lowland systems" (Environmental Monitoring and Assessment, 71 : 143-164, 2001.)
19 20 21 22 23		iii. Flow-weighted composite storm sampling, and base flow sampling, in outfalls for the following constituents/parameters as appropriate for the monitoring objective: (1) Flow, Hydrograph data including antecedent dry period, rainfall and runoff, discussion of representativeness of storm samples and storm types,
24		(2) TSS and turbidity,
25		(3) Conductivity if tidally influenced,
26		(4) Chloride,
27 28 29		(5) Metals (including, at a minimum, total and dissolved copper, zinc, , cadmium, and lead; and mercury sampling as appropriate in some high density commercial or industrial urban settings) and hardness,
30		(6) Base/Neutral/Acids (BNAs),
31 32		(7) Pesticides (commercially available and/or known to be applied roadside),
33 34		(8) Nutrients (including total nitrogen, phosphorus, nitrate/nitrite and orthophosphate),
35		(9) Biochemical oxygen demand (BOD), and
36 37		(10) Toxicity testing of a "seasonal first-flush" storm event (as defined by Ecology).

1 2	 iv. Grab samples in outfalls for the following constituents/parameters as appropriate for the monitoring objective:
3 4	(1) Total Petroleum Hydrocarbons (TPH) using NWTPH-Gx and NWTPH-Dx., and
5	(2) E. coli and Enterococci bacteria.
6 7	v. For in-line sediment traps, percent solids, pH, metals, and BNAs as appropriate for the contributing area land use.
8 9 10	d. The number of each type of event (e.g. baseflow; "seasonal first-flush" and/or other dry season rainfall; wet season rainfall) to be sampled at each location for each of the types of sampling identified in part C above.
11 12	e. An approved or final monitoring plan must be adopted no later than 30 months after the effective date of this permit.
13 14 15 16 17	f. Full implementation of the stormwater and receiving water monitoring program shall begin no later than 36 months after the effective date of this permit. The third party or parties selected to develop the monitoring plan may continue to be utilized to collect and analyze the data and to write the subsequent reports required under this permit.
18	5. Monitoring Program Reporting Requirements
19 20 21 22 23 24 25	The stormwater monitoring report shall be submitted by December 31 each year, beginning in 2009. Each report shall include all monitoring data collected during the preceding period from October 1 through September 30. Each report shall also integrate data from earlier years into the analysis of results, as appropriate. Permittees that choose to participate in an integrated water quality monitoring program shall submit a single integrated monitoring report. Reports shall be submitted in both paper and electronic form and shall include:
26	a. A summary of the purpose, design, and methods of the monitoring program,
27	b. The status of implementing the monitoring program,
28 29 30	 A comprehensive data and QA/QC report for each part of the monitoring program, with an explanation and discussion of the results of each monitoring project,
31 32 33	d. An analysis of the results of each part of the monitoring program, including any identified water quality problems or improvements or other trends in stormwater or receiving water quality, and
34	e. Recommended future actions based on the findings.
35 36 37 38 39	f. If the Permittee monitors any pollutant more frequently than required by the required monitoring program, then the results of this monitoring shall be included in the report. If the Permittee conducts any other stormwater monitoring in addition to that required in the required monitoring program, then it shall provide a description of the additional monitoring in the report.

B. Best Management Practice (BMP) Effectiveness Monitoring Program

There is a need for more local information about the effectiveness of treatment and flow control BMPs. Much of the data about BMP effectiveness comes from other parts of the country and is based on a variety of different design criteria, rainfall types, and soil types - factors that can influence performance and make extrapolations to our situation questionable. Given the need for more data that is generated locally, how should this need be met?

The municipal stormwater permittees are the governmental entities that permit and regulate land development, and are responsible for the quality of water discharged to waters of the state through their storm sewer systems. Therefore, it seems appropriate to have the permittees primarily responsible for determining the effectiveness of measures intended to reduce the discharge of pollutants to the Maximum Extent Practicable. Is it appropriate to include BMP effectiveness monitoring as a requirement of this permit?

The Permittees and ports shall develop and implement a comprehensive, long-term BMP effectiveness monitoring program as described in this section. Structural Runoff Treatment BMPs, and Flow Reduction Strategies will be evaluated. The primary purpose of the BMP effectiveness monitoring program is to provide a feedback loop for adaptive management of the Permittees' stormwater management programs and the Department of Ecology's municipal stormwater permitting program. The BMP effectiveness monitoring program shall be designed to contribute to answering the following questions about the short term and long term performance of BMPS in protecting and restoring water quality and beneficial uses:

a. Is implementation of the Stormwater Management Program preventing impacts from the effects of new development by controlling construction and post-construction runoff?

b. Are the Permittees preventing impacts and seeing improvements to beneficial uses by implementing a comprehensive stormwater management program?

The Permittees and ports may choose to develop the BMP effectiveness monitoring program, conduct the monitoring, and report results through a single long-term monitoring program that will be supported by the combined resources of all of the Permittees and the ports; or they may independently develop a BMP effectiveness monitoring program, conduct the monitoring, and report results, in accordance with the requirements, below. If a collaborative approach is chosen, the committee process outlined in S8.A.2., above, shall be followed.

 1. BMP Effectiveness Monitoring - Program Coordination and Planning.

2 3 4 5 6 7 8	BMPs listed below, at no less than 2 sites per BMP, and 6 flow reduction strategies. The monitoring program must include QAPPs for each BMP and flow reduction strategy being monitored. The monitoring program must be developed by qualified staff or contractors that have experience with Ecology's or EPA's Guidelines for Quality Assurance Project Plans (QAPP). The Permittees shall support monitoring planning efforts by providing the following resources and information:
9	a. Responsibilities of Counties, Cities, and Ports of Seattle and Tacoma
10 11 12 13 14	i. Each Permittee shall identify potential sites where the following types of BMPs are in use or planned for installation (the BMPs shall have been/will be designed using criteria similar to the 2005 Western Washington Stormwater Management Manual). QAPPs for short detention time BMPs should follow the TAPE protocols. QAPPs for long detention time BMPs will need to develop sampling protocols. BMP treatment types:
16	(1) <u>Basic Treatment</u>
17	Biofiltration swale
18	Filter strip
19	Basic wetpond
20	Treatment wetland
21	Sand filter
22	(2) Metals/Phosphorus Treatment
23	Amended sand filter
24	Two facility treatment train
25	Compost amended filter strips
26	Bioretention
27	Large wetpond
28	(3) <u>Oil Control</u>
29	Linear sand filter
30	Catch basin insert
31 32	 Each Permittee shall provide a prioritized list of the types of structural treatment BMPs to monitor.
33 34 35	iii. Each City and County Permittee shall identify and describe a flow reduction strategy that is in use or planned for installation in their jurisdiction, and is suitable for monitoring.

1 2	iv. Each Permittee shall provide staff assistance as necessary to facilitate the evaluation and selection of potential sites.
3 4	b. Other special Permittees will have no responsibilities for BMP effectiveness monitoring under this section during this permit term.
5	2. BMP Effectiveness Monitoring Program Development, Review, and Approval
6	
7	Ecology is requesting comments on the question of reviewing and approving the Monitoring Programs.
8	Womtornig Frograms.
9	Should the Monitoring Programs be reviewed and approved, prior to implementation? If so, what should be the standard for review? Who is best capable
10	of doing the review? Should an independent entity review the monitoring program?
11	Or should Ecology build up expertise and do the review?
12	An alternative to reviewing and approving the monitoring program is to include
13	more detailed criteria for the monitoring program in the permit. That criteria would
14	need to be developed before the permit is issued.
15	
16	
17 18 19	The Permittees and ports shall submit a BMP effectiveness monitoring program plan no later than 2 years after the effective date of this permit. The monitoring plan shall be submitted in both paper and electronic form and shall include:
20 21 22	 A detailed discussion and description of the purpose, design, and methods of the BMP effectiveness monitoring program, including Quality Assurance Project Plans (QAPPs) for each BMP being monitored.
23 24 25	b. A detailed discussion and description of the purpose, design, and methods of the flow reduction strategy monitoring program, and QAPPs for each flow reduction strategy being monitored.
26 27	c. A list and maps of all proposed and selected monitoring sites, including the date of installation/construction.
28	d. The Permittees' prioritized lists of structural treatment BMPs to monitor.
29	e. Records of inspection and maintenance on each of the BMPs selected.
30	f. The methods, protocols, analytical laboratory methods to be used.
31 32	g. The frequency of data collection to occur at each station or site and the number and types of precipitation events to be targeted for sampling.
33 34 35	h. The parameters to be measured in the inflow to and outflow from each BMP, or flow reduction strategy, as appropriate for the contributing area land use and performance expectations of the selected BMP:

1	i. Flow (rate, duration and volume)
2 3	 ii. Hydrograph data including antecedent dry period, rainfall and runoff, discussion of representativeness of storm samples and storm types.
4	iii. TSS,
5	iv. pH, hardness, and temperature,
6 7	v. Metals (including, at a minimum, total and dissolved copper, zinc, arsenic, cadmium, chromium, and lead),
8	vi. Total Petroleum Hydrocarbons (NWTPH-Gx and NWTPH-Dx),
9	vii. BNAs,
10	viii. Pesticides (commercially available and/or known to be applied roadside)
11 12	ix. Nutrients (including total nitrogen, total phosphorus, nitrate/nitrite and orthophosphate),
13	x. Biochemical oxygen demand (BOD),
14	xi. E. coli and Enterocci bacteria, and/or
15	xii. Toxicity
16 17 18	 The BMP effectiveness monitoring program must also describe a framework for Phase II Permittees in western Washington to enhance BMP effectiveness monitoring during future permit cycles.
19 20	j. An approved BMP effectiveness monitoring plan must be adopted by no later than 30 months after the effective date of this permit.
21 22 23 24 25	k. Full implementation of the stormwater and receiving water monitoring program shall begin no later than 36 months after the effective date of this permit. The third party or parties selected to develop the monitoring plan may continue to be utilized to collect and analyze the data and to write the subsequent reports required under this permit.
26	3. BMP Effectiveness Monitoring Reporting Requirements
27 28 29 30 31 32 33	The BMP effectiveness monitoring report shall be submitted by December 31 each year, beginning in 2009. Each report shall include all monitoring data collected during the preceding period from October 1 through September 30. Each report shall also integrate data from earlier years into the analysis of results, as appropriate. Permittees that choose to participate in an integrated water quality monitoring program shall submit a single integrated monitoring report. Reports shall be submitted in both paper and electronic form and shall include:
34	a. A summary of the purpose, design, and methods of the monitoring program,
35	b. The status of implementing the monitoring program,
36 37	c. The status of implementing the QAPP for each part of the monitoring program, with an explanation and discussion of the results of each component,

1 2		 d. An analysis of the results of each component of the monitoring program, including any identified BMP performance problems, and
3		e. Recommended future actions based on the findings.
4		
5	S7.	STORMWATER MANAGEMENT PROGRAM
6		
7		Note to Reviewers:
8 9		Ecology is specifically requesting comments on the organization of the Stormwater Management Program in the Phase I and Western Washington Phase II permits.
10		
11		The current organization in the Phase II permit follows the EPA six minimum measures, while the organization for the Phase I municipal stormwater permit reflects
12		the old permit and other factors. Should the two permits have a consistent
13		organizational structure/outline for the stormwater management program? If so, should the structure follow the organization either the Phase I or Western Washington
14		Phase II permit, or a different structure altogether?
15		
16 17 18 19 20		A. Each Permittee shall implement a Stormwater Management Program (SWMP) during the term of this permit. For the purpose of this permit a stormwater management program is a set of actions comprising the <i>components</i> listed in S7.B., S7.C.1 through S7.C.10., and additional actions and activities, where necessary, to meet the requirements of applicable TMDLs.
21 22 23 24 25 26 27 28		1. Each Permittee shall prepare written documentation of their SWMP and submit it to Ecology in written and electronic formats with the first year annual report, in accordance with the requirements in S9 REPORTING REQUIREMENTS. The documentation of the SWMP shall be organized according to the program components in S7.C., and shall be updated annually. The SWMP documentation shall include a description of each of the program components included in S7.C, and any additional actions necessary to meet the requirements of applicable TMDLs.
29 30 31		Each permittee shall track the cost of development and implementation of the SWMP required by this section. This information shall be included in the annual report.
32 33 34 35 36		B. The SWMP shall be designed to <u>protect water quality by reducing reduce</u> the discharge of pollutants from MS4s to the maximum extent practicable and protect water quality. [The Clean Water Act protects water quality by requiring that the discharge of pollutants from MS4's be reduced to the maximum extent practicable. The protection of water quality is not separate from MEP.]

1 2 3 4	Permittees are to continue implementation of existing stormwater management programs until they begin implementation of the updated stormwater management program in accordance with the terms of this permit, including implementation schedules.
5 C. 6 7 8 9	The SWMP shall include the components listed below. All components are mandatory and must be implemented by each Permittee. The requirements of the stormwater management program shall apply to municipal separate storm sewers and areas served by municipal separate storm sewers owned or operated by each Permittee. Co-Permittees and Secondary Permittees are responsible for implementation of Stormwater Management Programs as indicated in Special Condition S8.
11	1. Legal Authority
12 13 14 15 16 17	a. No later than the effective date of this permit, each Permittee must be able to demonstrate that they operate pursuant to adequate legal authority which authorizes or enables the Permittee to control, within the limits of its jurisdiction, discharges to and from municipal separate storm sewers owned or operated by the Permittee. This legal authority, which may be a combination of statute, ordinance, permit, contracts, orders, interagency agreements, or similar means, shall include the ability to:
19 20 21	b. This legal authority, which may be a combination of statute, ordinance, permit, contracts, orders, interagency agreements, or similar means, shall include the ability to:
22 23 24 25	 Control the contribution of pollutants to municipal separate storm sewers owned or operated by the Permittee from stormwater discharges associated with industrial activity, and control the quality of stormwater discharged from sites of industrial activity;
26 27	ii. Prohibit illicit discharges to the municipal separate storm sewer owned or operated by the Permittee;
28 29 30	 Control the discharge of spills and the dumping or disposal of materials other than stormwater into the municipal separate storm sewers owned or operated by the Permittee;
31 32 33 34 35 36	iv. Control the contribution of pollutants from one portion of the municipal separate storm sewer system to another portion of the municipal separate storm sewer system, where there is a physical interconnection between municipal separate storm sewers owned or operated by the municipality, and those of an adjoining municipality or other public entity, including co-Permittees; [Moved to S7.C.1.b. below]
37 38	$\underline{i}v$. Require compliance with conditions in ordinances, permits, contracts, or orders; and,
39 40 41	vi. Within the limitations of state law, carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and non-compliance with permit conditions, including the prohibition on illicit

1 2		discharges to <u>and from</u> the municipal separate storm sewer and compliance with local ordinances.
3 4 5 6 7 8 9		b. No later than 24 months after the effective date of the permit, the permittee shall develop the necessary contracts, interagency agreements, or other similar means to control the contribution of pollutants from one portion of the municipal separate storm sewer system to another portion of the municipal separate storm sewer system or to a POTW system, where there is a physical interconnection between municipal separate storm sewers owned or operated by the municipality, and those of an adjoining municipality or other public entity, including co-Permittees.
11 12 13 14		c. Each Permittee shall submit, no later than <u>one-two</u> years from the effective date of the permit, a statement by its legal counsel that the Permittee has all necessary legal authority to comply with this permit. [No legal counsel would be willing or able to make such a statement.]
15	2.	Gathering, Maintaining, and Using Adequate Information
16 17 18 19		The SWMP shall include an ongoing program for gathering, maintaining, and using adequate information to conduct planning, priority setting, and program evaluation activities. The information and its form of retention shall include but not be limited to:
20 21 22 23 24 25 26 27		a. No later than 2 years from the effective date, each permittee shall map all known municipal separate storm sewer outfalls owned or operated by the permittee (or connections to outfall systems that are not owned or operated by the permittee) and receiving waters, and structural stormwater BMPs owned, operated, or maintained by the Permittee. [Not all outfalls are accessible by the permittee. Many MS4 outfalls, where the stormwater conveyance system discharges to the receiving water, are located on private properties and the permittee does not have legal access.]
28 29 30 31 32 33 34 35 36 37 38		b. No later than 4 years from the effective date of this permit, and within urban/higher density rural subbasins, [see definition inserted in definitions section] each permittee shall map tributary conveyances, the associated drainage areas, and land use of all municipal separate storm sewer outfalls owned or operated by the permittee (or connections to outfall systems that are not owned or operated by the permittee) with a 24" inches nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems, and indicate type, material, and size where known. All regulated municipalities (including those covered under other municipal permits) within the same WRIA are encouraged to pool municipal resources for more cost effective and coordinated implementation of this permit responsibility.
39 40 41 42		c. No later than 4 years from the effective date of this permit each permittee shall map areas served by the Permittee's MS4 that discharge stormwater to groundwater but are not designed to discharge through facilities regulated under the UIC program.

iii. Water quality and physical characteristics of receiving water that may be impacted by stormwater. g. Each Permittee shall make available to Ecology, upon request, all available GIS data layers depicting outfall locations, tributary conveyances, structural stormwater BMPs, and, if known, the associated drainage areas of 24" municipal separate storm sewer outfalls (or connections to outfall systems that are not part of the permittee's municipal separate storm sewer system). GIS data shall be submitted in the format specified by Ecology at: http://www.ccy.wa.gov/services/gis/data/standards.htm. [The Spatial Data Standards for submittal on this Dept of Ecology web page are not acceptable. The page states that NGVD 29 is the vertical datum. The vertical datum should be NAVD-88. NGVD 29 is a datum with well-known flaws and limitations, it has been superseded by NAVD-88 and its use for any purpose other than historical reference is strongly discouraged. NAVD-88 is compatible with GPS derived measurements and is required to meet federal data standards. The page states that the coordinate zone is Washington South. This is inconsistent with RCW 58.20 and with King County data standards. While Olympia is in Washington South, King County is by RCW Washington North zone. The Washington State Plane Coordinate System was designed as a two-zone system to keep scale errors below 1:10,000. Use of South Zone as a state wide single zone defeats the logical design of the number system (obvious difference between N and E coordinates) as well as violating the scale factor design. Use of the South Zone for statewide reference is not advisable. Discussions are being held pursuant to establishing a Single-Zone system for Washington. If that conversion happens, agencies will need to convert to the new system within some timeframe that will be determined at a later date. Further, all data kept for King County GIS purposes are in Washington North by policy. Coordinates should be reported in the zone specified by RCW 58.20.] Notifica			
f. No later than 2 years from the effective date each permittee shall establish, maintain and make available to the public, a data base, including at least the following information. All Regulated municipalities (including those covered under other municipal permits) within the same WRIA are encouraged to pool municipal resources for more cost effective and consistent implementation of this permit responsibility on a watershed basis. i. Precipitation records. ii. Water quality and quantity records. iii. Water quality and physical characteristics of receiving water that may be impacted by stormwater. g. Each Permittee shall make available to Ecology, upon request, all available GIS data layers depicting outfall locations, tributary conveyances, structural stormwater BMPs, and, if known, the associated drainage areas of 24" municipal separate storm sewer outfalls (or connections to outfall systems that are not part of the permittee's municipal separate storm sewer system). GIS data shall be submitted in the format specified by Ecology at: http://www.ecy.wa.gov/services/gis/data/standards.htm. [The Spatial Data Standards for submittal on this Dept of Ecology web page are not acceptable. The page states that NGVD 29 is the vertical datum. The vertical datum should be NAVD-88. NGVD 29 is a datum with well-known flaws and limitations, it has been superseded by NAVD-88 and its use for any purpose other than historical reference is strongly discouraged. NAVD-88 is compatible with GPS derived measurements and is required to meet federal data standards. The page states that the coordinate zone is Washington South. This is inconsistent with RCW 58.20 and with King County data standards. While Olympia is in Washington South, King County data standards. While Olympia is in Washington South, King County is by RCW Washington North zone. The Washington South, King County data standards. While Olympia is in Washington South, King County is by RCW washington South zone as a state wide single zone defeats the logical design o	1	d.	Map(s) depicting existing land use
maintain and make available to the public, a data base, including at least the following information. All Regulated municipalities (including those covered under other municipal permits) within the same WRIA are encouraged to pool municipal resources for more cost effective and consistent implementation of this permit responsibility on a watershed basis. i. Precipitation records. ii. Stormwater quality and quantity records. iii. Water quality and physical characteristics of receiving water that may be impacted by stormwater. iii. Water quality and physical characteristics of receiving water that may be impacted by stormwater. iii. Water quality and physical characteristics of receiving water that may be impacted by stormwater. iii. Water quality and physical characteristics of receiving water that may be impacted by stormwater. iii. Water quality and physical characteristics of receiving water that may be impacted by stormwater. g. Each Permittee shall make available to Ecology, upon request, all available GIS data layers depicting outfall locations, tributary conveyances, structural stormwater BMPs, and, if known, the associated drainage areas of 24" municipal separate storm sever outfalls (or connections to outfall systems that are not part of the permittee's municipal separate storm sewer system). GIS data shall be submitted in the format specified by Ecology at: http://www.ecy.wa.gov/services/gis/data/standards.htm. [The Spatial Data Standards for submittal on this Dept of Ecology web page are not acceptable. The page states that NGVD 29 is the vertical datum. The vertical datum should be NAVD-88. NGVD 29 is a datum with well-known flaws and limitations, it has been superseded by NAVD-88 and its use for any purpose other than historical reference is strongly discouraged. NAVD-88 is compatible with GPS derived measurements and is required to meet federal data standards. While Olympia is in Washington South, King County data standards. While Olympia is in Washington State Plane Coordinate System was	2	e.	Map(s) depicting zoning.
iii. Stormwater quality and quantity records. iiii. Water quality and physical characteristics of receiving water that may be impacted by stormwater. g. Each Permittee shall make available to Ecology, upon request, all available GIS data layers depicting outfall locations, tributary conveyances, structural stormwater BMPs, and, if known, the associated drainage areas of 24" municipal separate storm sewer outfalls (or connections to outfall systems that are not part of the permittee's municipal separate storm sewer system). GIS data shall be submitted in the format specified by Ecology at: http://www.ecy.wa.gov/services/gis/data/standards.htm. [The Spatial Data Standards for submittal on this Dept of Ecology web page are not acceptable. The page states that NGVD 29 is the vertical datum. The vertical datum should be NAVD-88. NGVD 29 is a datum with well-known flaws and limitations, it has been superseded by NAVD-88 and its use for any purpose other than historical reference is strongly discouraged. NAVD-88 is compatible with GPS derived measurements and is required to meet federal data standards. The page states that the coordinate zone is Washington South. This is inconsistent with RCW 58.20 and with King County data standards. While Olympia is in Washington South, King County is by RCW Washington North zone. The Washington State Plane Coordinate System was designed as a two-zone system to keep scale errors below 1:10.000. Use of South Zone as a state wide single zone defeats the logical design of the number system (obvious difference between N and E coordinates) as well as violating the scale factor design. Use of the South Zone for statewide reference is not advisable. Discussions are being held pursuant to establishing a Single-Zone system for Washington. If that conversion happens, agencies will need to convert to the new system within some timeframe that will be determined at a later date. Further, all data kept for King County GIS purposes are in Washington North by policy. Coordinates should be repor	4 5 6 7	f.	maintain and make available to the public, a data base, including at least the following information. All Regulated municipalities (including those covered under other municipal permits) within the same WRIA are encouraged to pool municipal resources for more cost effective and consistent implementation of
iii. Stormwater quality and quantity records. iiii. Water quality and physical characteristics of receiving water that may be impacted by stormwater. g. Each Permittee shall make available to Ecology, upon request, all available GIS data layers depicting outfall locations, tributary conveyances, structural stormwater BMPs, and, if known, the associated drainage areas of 24" municipal separate storm sewer outfalls (or connections to outfall systems that are not part of the permittee's municipal separate storm sewer system). GIS data shall be submitted in the format specified by Ecology at: http://www.ecy.wa.gov/services/gis/data/standards.htm. [The Spatial Data Standards for submittal on this Dept of Ecology web page are not acceptable. The page states that NGVD 29 is the vertical datum. The vertical datum should be NAVD-88. NGVD 29 is a datum with well-known flaws and limitations, it has been superseded by NAVD-88 and its use for any purpose other than historical reference is strongly discouraged. NAVD-88 is compatible with GPS derived measurements and is required to meet federal data standards. The page states that the coordinate zone is Washington South. This is inconsistent with RCW 58.20 and with King County data standards. While Olympia is in Washington South, King County is by RCW Washington North zone. The Washington State Plane Coordinate System was designed as a two-zone system to keep scale errors below 1:10.000. Use of South Zone as a state wide single zone defeats the logical design of the number system (obvious difference between N and E coordinates) as well as violating the scale factor design. Use of the South Zone for statewide reference is not advisable. Discussions are being held pursuant to establishing a Single-Zone system for Washington. If that conversion happens, agencies will need to convert to the new system within some timeframe that will be determined at a later date. Further, all data kept for King County GIS purposes are in Washington North by policy. Coordinates should be repor	9		i. Precipitation records.
g. Each Permittee shall make available to Ecology, upon request, all available GIS data layers depicting outfall locations, tributary conveyances, structural stormwater BMPs, and, if known, the associated drainage areas of 24" municipal separate storm sewer outfalls (or connections to outfall systems that are not part of the permittee's municipal separate storm sewer system). GIS data shall be submitted in the format specified by Ecology at: http://www.ecy.wa.gov/services/gis/data/standards.htm. [The Spatial Data Standards for submittal on this Dept of Ecology web page are not acceptable. The page states that NGVD 29 is the vertical datum. The vertical datum should be NAVD-88. NGVD 29 is a datum with well-known flaws and limitations, it has been superseded by NAVD-88 and its use for any purpose other than historical reference is strongly discouraged. NAVD-88 is compatible with GPS derived measurements and is required to meet federal data standards. The page states that the coordinate zone is Washington South. This is inconsistent with RCW 58.20 and with King County data standards. While Olympia is in Washington South, King County is by RCW Washington North zone. The Washington State Plane Coordinate System was designed as a two-zone system to keep scale errors below 1:10,000. Use of South Zone as a state wide single zone defeats the logical design of the number system (obvious difference between N and E coordinates) as well as violating the scale factor design. Use of the South Zone for statewide reference is not advisable. Discussions are being held pursuant to establishing a Single-Zone system for Washington. If that conversion happens, agencies will need to convert to the new system within some timeframe that will be determined at a later date. Further, all data kept for King County GIS purposes are in Washington North by policy. Coordinates should be reported in the zone specified by RCW 58.20.] Notification of updated GIS data layers shall be included in annual reports.	10		
data layers depicting outfall locations, tributary conveyances, structural stormwater BMPs, and, if known, the associated drainage areas of 24" municipal separate storm sewer outfalls (or connections to outfall systems that are not part of the permittee's municipal separate storm sewer system). GIS data shall be submitted in the format specified by Ecology at: http://www.ecy.wa.gov/services/gis/data/standards.htm. [The Spatial Data Standards for submittal on this Dept of Ecology web page are not acceptable. The page states that NGVD 29 is the vertical datum. The vertical datum should be NAVD-88. NGVD 29 is a datum with well-known flaws and limitations, it has been superseded by NAVD-88 and its use for any purpose other than historical reference is strongly discouraged. NAVD-88 is compatible with GPS derived measurements and is required to meet federal data standards. The page states that the coordinate zone is Washington South. This is inconsistent with RCW 58.20 and with King County data standards. While Olympia is in Washington South, King County is by RCW Washington North zone. The Washington State Plane Coordinate System was designed as a two-zone system to keep scale errors below 1:10,000. Use of South Zone as a state wide single zone defeats the logical design of the number system (obvious difference between N and E coordinates) as well as violating the scale factor design. Use of the South Zone for statewide reference is not advisable. Discussions are being held pursuant to establishing a Single-Zone system for Washington. If that conversion happens, agencies will need to convert to the new system within some timeframe that will be determined at a later date. Further, all data kept for King County GIS purposes are in Washington North by policy. Coordinates should be reported in the zone specified by RCW 58.20.] Notification of updated GIS data layers shall be included in annual reports.	11 12		
h. Upon request, and to the extent appropriate, Permittees shall provide mapping	13 14 15 16 17 18 19 20 21 22 22 23 24 25 26 27 28 29 33 33 33 33 33 33 34	g.	data layers depicting outfall locations, tributary conveyances, structural stormwater BMPs, and, if known, the associated drainage areas of 24" municipal separate storm sewer outfalls (or connections to outfall systems that are not part of the permittee's municipal separate storm sewer system). GIS data shall be submitted in the format specified by Ecology at: http://www.ecy.wa.gov/services/gis/data/standards.htm. [The Spatial Data Standards for submittal on this Dept of Ecology web page are not acceptable. The page states that NGVD 29 is the vertical datum. The vertical datum should be NAVD-88. NGVD 29 is a datum with well-known flaws and limitations, it has been superseded by NAVD-88 and its use for any purpose other than historical reference is strongly discouraged. NAVD-88 is compatible with GPS derived measurements and is required to meet federal data standards. The page states that the coordinate zone is Washington South. This is inconsistent with RCW 58.20 and with King County data standards. While Olympia is in Washington South, King County data standards. While Olympia is in Washington South, King County is by RCW Washington North zone. The Washington State Plane Coordinate System was designed as a two-zone system to keep scale errors below 1:10,000. Use of South Zone as a state wide single zone defeats the logical design of the number system (obvious difference between N and E coordinates) as well as violating the scale factor design. Use of the South Zone for statewide reference is not advisable. Discussions are being held pursuant to establishing a Single-Zone system for Washington. If that conversion happens, agencies will need to convert to the new system within some timeframe that will be determined at a later date. Further, all data kept for King County GIS purposes are in Washington North by policy. Coordinates should be reported in the zone specified by RCW 58.20.]
TO THE THOUGHOUSE OF CHANGES AND ACCOMMINED AND THE THAT INVENTED AND THE	41 42	h.	Upon request, and to the extent appropriate, Permittees shall provide mapping information to Co-Permittees and Secondary Permittees and may charge for the

1 2	Permittee's costs of providing the data and may include overhead costs for maintenance and upkeep of the mapping system.
3	3. Coordination
4 5 6 7 8	a. The SWMP shall include coordination mechanisms among Permittees, co- Permittees, and secondary Permittees to encourage coordinated stormwater- related policies, programs and projects within a watershed. The SWMP shall also include coordination among departments within each jurisdiction to ensure compliance with the terms of this permit.
9	b. Minimum Performance Measures:
10 11 12 13	 No later than 6 months 12 months after the effective date of this permit, establish, in writing, and begin implementation of, intragovernmental (internal) coordination procedures to ensure compliance with the terms of this permit.
14 15 16	 No later than 6 months 24 months after the effective date of this permit, establish, in writing, and begin implementation of, intergovernmental coordination procedures on stormwater management, including
17 18 19	 Coordination mechanisms clarifying roles and responsibilities to ensure the control of pollutants between physically interconnected MS3s and POTW systems.
20 21 22	 Coordinating stormwater management activities, for shared waterbodies, among Permittees, to avoid conflicting plans, policies and regulations.
23 24	• Coordination necessary to develop an integrated monitoring program.
25	4. Public Involvement and Participation
26 27 28 29 30	[This requirement is an artifact of the first Phase I permits, which gave great flexibility to permittees to create their SWMPs. As the permit becomes more prescriptive, the role for public involvement and participation in the development of SWMPs is somewhat diminished. The scope of the public involvement program should be reduced accordingly.]
31 32 33 34 35 36	a. The SWMP shall provide ongoing opportunities for public involvement <u>as</u> appropriate in the <u>Permittee'sdecision making processes involving</u> stormwater management programs and <u>the priorities for appropriate aspects of those programs</u> , through advisory councils, watershed committees, participation in developing rate structures, stewardship programs, environmental activities, or other similar activities.
37	b. Minimum performance measures:
38 39	i. No later than 6 months after the effective date of this permit, adopt a process to create opportunities for public participation in the decision

1 2 3 4 5 6 7 8	making processes involving the development, implementation and update of the permittees SWMP. Each Permittee must develop and implement a process for consideration of public comments on their SWMP. [Given the more prescriptive nature of this permit, public involvement in decision making on the SWMP will likely be limited to that which occurs as part of the annual budget process when the extent of funding is determined for the programs and actions required by this permit.]
9 10	ii. No later than 12 months after the effective date of this permit, begin implementation of the public involvement program.
11 12 13 14 15	iii. Each Permittee must make their SWMP, the SWMP documentation required under S7.A(1) and all submittals required by this permit, including annual reports, available to the public on the permitees' website or submitted in electronic format to the Department for posting on the Department's website.
16	5. Controlling Runoff from New Development, Redevelopment and Construction Sites
17 18 19	a. The SWMP shall include a program to prevent and control the impacts of runoff from new development, redevelopment, and construction activities. The program shall apply to private and public development, including roads.
20	b. Minimum performance measures:
21 22 23 24 25 26 27 28 29	i. The Minimum Requirements, thresholds, and definitions in Appendix 1 (which is by this reference as if set forth fully herein), for new development, redevelopment, and construction sites must be included in ordinance or other enforceable documents adopted by the local government. More stringent requirements may be used, and/or certain requirements may be tailored to local circumstances through the use of basin plans or other similar water quality and quantity planning efforts. Such local requirements and thresholds must provide equal protection of receiving waters and equal levels of pollution control as compared to Appendix 1.
30 31	 Adjustment and variance criteria equivalent to those in Appendix 1 must be included.
32 33 34 35 36 37 38 39 40	iii. The local requirements must include a site planning process and BMP selection and design criteria that, when used to implement the minimum requirements in Appendix 1 (or equivalent requirements approved by Ecology) on a site specific basis, will achieve the goals of these BMPs to protect water quality, reduce by reducing the discharge of pollutants to the maximum extent practical practicable, and satisfy the state requirement under chapter 90.48 RCW to apply all known, available, reasonable methods of prevention, control and treatment (AKART) prior to discharge. Permittees must document how the criteria and requirements will protect water quality,

1 2	reduce the discharge of pollutants to the maximum extent practical, and satisfy the state AKART requirements meet the BMP protection goals.
3 4 5 6	Permittees who choose to use the site planning process, and BMP selection and design criteria in the 2005 <u>Stormwater Management Manual for Western Washington</u> , or an equivalent manual approved by the Department, may cite this choice as their sole documentation to meet this requirement.
7 8 9 10	iv. The program must allow non-structural preventive actions and source reduction approaches such as <i>Low Impact Development</i> Techniques (LID), measures to minimize the creation of impervious surfaces, and measures to minimize the disturbance of soils and vegetation.
11 12 13 14 15	v. Deadlines for and Review of Local Manual and Ordinances. No later than 12 months from the effective date of this permit, each Permittee must adopt a local program that meets the requirements in S7C.5.ab.i through iv., above. Ecology review and approval of the local manual and ordinances is required. To ensure compliance with the 12 month deadline, Permittees may use the following review process:
17 18 19 20	(1) The Permittee submits draft enforceable requirements, technical standards and manual to Ecology no later than 8 months after the effective date of this permit. Ecology will review and provide written response to the Permittee.
21 22 23 24	(2) If this review process is followed, the deadline for adoption of enforceable requirements, technical standards and manual shall be automatically extended by the number of calendar days that Ecology exceeds a 60 day period for written response.
25 26 27	vi. No later than 12 months after the effective date of this permit, the program must establish legal authority, through approval of new development, to inspect private stormwater facilities and enforce maintenance standards.
28 29 30 31 32	vii. No later than 18 months after the effective date of this permit, the program must include a process of permits, plan review, inspections, and enforcement capability to meet the following standards for both private and public projects, using <i>qualified personnel</i> (staff or qualified contractors):
33 34 35 36 37	(1) Review all stormwater site plans for proposed development activities that meet the thresholds in Appendix 1. All Regulated municipalities (including those covered under other municipal permits) within the same WRIA are encouraged to pool municipal resources for more cost effective and coordinated implementation of this permit responsibility.
38 39 40	(2) Inspect prior to clearing and construction, all development sites that are hydraulically near a sediment/erosion-sensitive feature or have a high potential for sediment transport as determined through plan

1 2 3		review based on definitions and requirements in Appendix 2 (or equivalent as approved by DOE) [King County's newly adopted Critical Areas Ordinance and rules will provide equal or better
4 5 6 7 8 9	(3)	protection], which is by this reference as if set forth fully herein. Inspect all permitted development sites during construction to ensure proper installation and maintenance of required erosion and sediment controls. Enforce as necessary based on the inspection. This inspection may be combined with other inspections provided it is still performed by qualified personnel (staff or contractors).
10 11 12 13 14 15 16	(4)	Inspect all development sites upon completion of construction and prior to final approval/occupancy to ensure proper installation of permanent erosion controls and stormwater facilities/BMPs. Enforce as necessary based on the inspection. Also, ensure a maintenance plan is completed and responsibilty for maintenance is assigned. This inspection may be combined with other inspections provided it is still performed by qualified personnel (staff or contractors).
17 18 19	(5)	Compliance with the inspection requirements of S7.C.5.(b)vii.(2), (3), and (4), above shall be determined by the presence of an established inspection program designed to inspect all sites.
20 21	(6)	Each Permittee shall track and maintain records of all inspections and enforcement actions.
22 23 24 25 26 27 28	the "A ne loo rec	o later than the effective date of this permit, the Permittee must provide e "Notice of Intent for Construction Activity" and/or copies of the Notice of Intent for Industrial Activity" to representatives of proposed we development and redevelopment. Permittees will continue to enforce cal ordinances controlling runoff from construction sites that also quire coverage under the Industrial Stormwater General Permit and/or e Construction Stormwater General Permit.
29 30 31 32 33	Co an sit	ch permittee must provide a <i>dequate training for staff</i> involved in ontrolling Stormwater Runoff from New Development, Redevelopment, d Construction Sites, including permitting, plan review, construction e inspections, and enforcement, to carry out the provision of this ogram component.
34	6. Structural S	tormwater Controls
35 36 37 38 39 40 41 42	to addre hydrolo impacts includin Permitte develop	MP shall include a program to construct structural stormwater controls as impacts to beneficial uses resulting from disturbances to watershed gy and stormwater pollutant discharges. This program shall consider caused by stormwater discharges from areas of existing development, ag runoff from highways, streets and roads owned or operated by the see, and areas of new development, where impacts are anticipated as ment proceeds. This program shall address impacts that are not ely controlled by the other required actions of the SWMP, and shall
	1	

1 2 3		identify necessary actions and an implementation schedule. <u>It is understood that mitigating all existing development to current standards is not feasible and that only the highest-ranked problems can be addressed</u>
4 5 6 7 8 9 10 11 12		The program shall include the construction of projects such as regional flow control facilities, water quality treatment facilities, and retrofitting of existing flood control facilities. Permittees should also consider other means to address impacts from existing development, such as reduction of hydrologic changes through the use of on-site (infiltration and dispersion) stormwater management BMPs and site design techniques, habitat acquisition or restoration of forest cover and riparian buffers, for compliance with this requirement. Permittees may not use in-stream culvert replacement projects for compliance with this requirement.
13	b.	Minimum Performance Measures:
14 15 16 17 18 19 20		i. No later than 12 months after the effective date of this permit, each Permittee shall develop and begin implementing a Structural Stormwater Control program designed to control stormwater impacts that are not adequately controlled by the other required actions of the SWMP. The program shall include a description of projects and a construction schedule, for projects that are scheduled for implementation during the term of this permit.
21 22 23 24		ii. Each Permittee shall include a description of the Structural Stormwater Control Program in the written documentation of their SWMP that must be submitted with the first year annual report. The description of the Structural Stormwater Control Program must include the following:
25 26 27 28 29 30 31 32 33		 The goals that the Structural Stormwater Control Program are intended to achieve. The planning process used to develop the Structural Stormwater Control Program, including: the geographic scale of the planning process, the issues and regulations addressed, the steps in the planning process, the types of characterization information considered, the amount budgeted for implementation, and the public involvement process.
34 35 36 37		iii. For individual projects or programs of projects, provide a description of the expected benefits including reductions in pollutant loading, flow reductions, habitat enhancement or other benefits. For individual projects, provide the following information:
38 39 40 41 42		 The estimated pollutant load reduction that will result from each project designed to provide stormwater treatment. The expected outcome of each project designed to provide flow control. Any other expected environmental benefits.

1 2	iv. Information about the Structural Stormwater Control Program shall be updated with each annual report.
3	
4	7. Source Control Program
5 6 7	a. The SWMP shall include a program to reduce pollutants in runoff from areas that discharge to municipal separate storm sewers owned or operated by the Permittee. The program shall include:
8 9 10	 Requiring application of operational and structural source control BMPs, and, if necessary, treatment BMPs to pollution generating sources associated with existing land uses and activities.
11 12 13 14 15 16	ii. Inspections of pollutant generating sources at commercial, industrial and multifamily properties to ensure implementation of BMPs to control pollution discharging into municipal separate storm sewers owned or operated by the Permittee. All Regulated municipalities (including those covered under other municipal permits) within the same WRIA are encouraged to pool municipal resources for more cost effective and coordinated implementation of this permit responsibility.
18 19 20 21 22 23 24 25 26 27	iii. Application and enforcement of local ordinances at all applicable sites, including those with industrial stormwater general NPDES permit coverage. Municipalities may refer stormwater discharge problems associated with violations of local ordinances only after implementing progressive enforcement as required in S7.C.7.b.iv, below. Municipalities may not refer stormwater discharge problems associated with industrial NPDES Permittees to Ecology if the Permittee has local ordinances that impose stricter standards than imposed through the permit issued by Ecology. Permittees that are in compliance with the terms of this permit will not be held liable by Ecology for water quality standard violations caused by industries covered under an NPDES permit issued by Ecology.
29 30 31 32	iv. Reduction of pollutants associated with the application of pesticides, herbicides, and fertilizer discharging into municipal separate storm sewers owned or operated by the Permittee. [This is already covered under Maintenance and Operation]
33	b. Minimum Performance Measures for Source Control Program:
34 35 36 37 38 39 40	i. No later than 12 months after the effective date of this permit, adopt and begin enforcement of an ordinance requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities (See Appendix 3, to identify pollutant generating sources). The local source control requirements must include operational and structural source control BMPs that, when used on a site specific basis, will minimize the transfer of pollutants to POTWS and protect water quality, by reduceing the discharge of pollutants to the maximum extent

practical, and satisfy the state requirement under chapter 90.48 RCW to apply all known, available, reasonable methods of prevention, control and treatment (AKART) prior to discharge. Permittees must document the stormwater source control BMP selection process for different urban activities and land uses, the types of BMPs and design criteria for those BMPs, the technical basis and an assessment of how the practices will protect water quality, reduce by reducing the discharge of pollutants to the maximum extent practical, and satisfy the state AKART requirements. Permittees may choose to use the source control BMPs in Volume IV of the 2001 Stormwater Management Manual for Western Washington or an equivalent manual approved by Ecology. If the demonstration approach is chosen, the Permittee must submit the proposed source control program and all necessary documentation to Ecology for review, no later than 9 months after the effective date of this permit. If Ecology does not request changes within 30 days, the proposed source control BMPs are considered approved.

Operational source control BMPs shall be required for all pollutant generating sources. Structural source control BMPs shall be required for pollutant generating sources that cause an illicit discharge or other pollution problem, including: causing or contributing to a violation of surface water, ground water, or sediment management standards; nuisance; or threat to public health and safety, because of inadequate stormwater controls. Implementation of source control requirements may be done through education and technical assistance programs, provided that formal enforcement authority is available to the Permittee and is used as necessary.

- ii. No later than 12 months after the effective date of this permit, compile a list of existing commercial, multifamily, industrial and government sites which are potentially pollution generating (see Appendix 3 for identifying sites). The list shall be updated no later than 180 days prior to the expiration date of this permit.
- iii. Starting no later than 24 months after the effective date of this permit, conduct an inspection program for all the listed sites, with adequate enforcement capability to ensure implementation of source control BMPs in accordance with the ordinance required in S7.C.8.b.i., above. 60% of the total of the listed properties must be inspected within 5 years of the effective date of the permit, provided that a portion of the inspections must be conducted during each subsequent year of the permit term. The inspection program shall be designed to inspect all sites, to the extent allowable under state law, once every 8 years. Adjust the inspection program as needed to incorporate new sites added to the list and reflect sites already inspected.
- iv. No later than 24 months after the effective date of this permit, each Permittee shall implement a progressive enforcement policy to ensure that facilities are brought into compliance with stormwater requirements within a reasonable time period as specified below:

1 2 3 4 5 6	(1) In the event that a Permittee determines, based on an inspection conducted above, that a site has failed to adequately implement all necessary BMPs, that Permittee shall take progressive enforcement action which, at a minimum, shall include a follow up contact (e.g., phone call, reminder letter, etc.) or inspection within 4 weeks 2 months from the date of the initial inspection.
7 8 9 10	(2) When a Permittee determines that a facility has failed to adequately implement BMPs after a follow-up inspection, that Permittee shall take further enforcement action as established through authority in its municipal code and ordinances, or through the judicial system.
11 12 13 14 15	(3) Each Permittee shall maintain records, including documentation of each site visit, inspection reports, warning letters, notices of violations, and other enforcement records, demonstrating a good faith effort to bring facilities into compliance. Each permittee shall also maintain records of sites that are not inspected because the property owner denies entry.
17 18 19 20	(4) A Permittee may refer violations of local ordinances to Ecology provided that the Permittee has made a good faith effort of progressive enforcement. At a minimum a Permittee's good faith effort must include documentation of:
21	 Two follow-up inspections, and
22	 Two warning letters or notices of violation
23 24 25 26 27 28 29	w. [Moved this requirement to the Maintenance and Operation section and revised some of its wording] No later than 12 months after the effective date of this permit, adopt and implement policies and procedures to reduce pollutants associated with the application of pesticides, herbicides, fungicides, and fertilizer on all public property owned or managed by the Permittee, including parks and road right-of-ways. The program shall include the following, at a minimum:
30 31	(1)Identify and quantify all pesticides, herbicides, fungicides, and fertilizer used by the Permittee;
32 33	(2)Identify application practices of each listed product: location, timing, application rates;

1 2		(5)Implement procedures to use and manage herbicides, pesticides, fungicides, and fertilizer consistent with the adopted source control
3		BMPs.
4 5	V i .	No later than 24 months after the effective date of this permit, provide training to facilitate proper operation of the source control program. This
6		training shall cover the legal authority for source control (adopted codes,
7		ordinances, rules, etc.), source control BMPs and their proper application,
8		inspection protocols, and enforcement procedures. The training shall be
9		provided to all existing and future new field staff involved in operation of
10 11		the source control program. Documentation of the training provided and the
		staff trained shall be included in the third annual report and every annual report thereafter. Provide a minimum of two training sessions regarding the
12 13 14 15		
1 <i>3</i> 1 <i>1</i>		source control ordinance, inspection procedures and source control BMPs,
14 15		for inspection and other appropriate field staff, to facilitate adequate
16		implementation of the source control program. The first training shall be conducted no later than 24 months after the effective date of this permit.
17		The second training shall be conducted no later than 48 months after the
18		effective date of this permit.
19		effective date of this permit.
	0 1111 14	
20	8. Illicit (Connections and Illicit Discharges Detection and Elimination
21	a. The	e SWMP shall include an ongoing program to detect, remove and prevent
22	illi	cit connections and illicit discharges, including spills, into the municipal
22 23	sep	parate storm sewers owned or operated by the Permittee. The program shall
24	inc	lude:
25	i.	Effectively prohibiting all types of illicit discharges to the municipal
26		separate storm sewers owned or operated by the Permittee other than those
27		authorized under a separate NPDES permit. The categories of non-
28		stormwater discharges listed in Appendix 4 must be addressed only if
29		identified as a contributor of pollution to the MS3s owned or operated by the
30		Permittee. As necessary, the Permittee(s) shall incorporate appropriate
31		control measures in the stormwater management program to ensure the non-
32		stormwater discharges listed in Appendix 4 are not sources of pollutants to
33		waters of the state.
34	ii.	Detecting and eliminating illicit connections to municipal separate storm
35		sewers owned or operated by the Permittee.
36	iii.	On-going identification of illicit discharges into the municipal separate
37		storm sewer system, through inspections, monitoring and complaint
38		response.
39	iv.	Preventing, responding to, and eleaning having the responsible party
40		eliminate and clean up illicit discharges into the municipal separate storm

b. Minimum Performance Measures:

- i. No later than the effective date of this permit, each Permittee must continue implementing an on-going program to prevent, identify and respond to illicit connections and illicit discharges. The program shall include adopting procedures for reporting and correcting or removing illicit connections, spills and other illicit discharges when they are suspected or identified. The program shall also include procedures for controlling pollutants entering the MS4 from an interconnected, adjoining MS4. Illicit connections and illicit discharges shall be identified through field screening, inspections, complaints/reports, construction inspections, maintenance inspections, source control inspections, and/or monitoring information, as appropriate.
- ii. No later than 12 months after the effective date of the permit, the Each Permittee shall provide appropriate training forensure that all existing and future new municipal field staff who are responsible for identification, investigation, termination, cleanup, and reporting illicit discharges, including spills, improper disposal and illicit connections, are appropriately trained to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques, or requirements.

 Documentation of the training provided and the staff trained shall be included in the second annual report and every annual report thereafter. Training shall be completed no later than 12 months after the effective date of this permit. Refresher training shall be conducted on an annual basis thereafter.
- No later than 24 months after the effective date of this permit, All-an ongoing training program shall be developed and implemented for all existing and future new municipal field staff, which as part of their normal job responsibilities might come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system. These staff shall be trained on the identification of an illicit discharge/connection and on the proper procedures for reporting the illicit discharge/connection. Followup training shall be provided as needed to address changes in procedures, techniques, or requirements. Documentation of the training provided and the staff trained shall be included in the third annual report and every annual report thereafter. All Regulated municipalities (including those covered under other municipal permits) within the same WRIA are encouraged to pool municipal resources for more cost effective implementation of this training program. Initial training shall be completed no later than two years from the effective date of this permit. Permittees shall conduct refresher training on an annual basis thereafter.
- iv.— [This item is extremely costly and is not necessary to adequately control illicit discharges] Each Permittee shall initiate a program to develop and maintain a map of all connections to the municipal separate storm sewer authorized or allowed by the permittee. Each Permittee shall map

1 2			etions to the municipal separate storm sewer according to the ing schedule:
3		Cit	ty of Seattle and City of Tacoma: second year annual report
4 5 6		Co	ohomish, King, Pierce and Clark Counties: one half the area of the punty within urban growth boundaries and urbanized areas in the 4 th car annual report
7 8 9 10	<u>i</u> v.	citizen no late	Permittee shall continue to provide a publicly listed water quality complaints/reports telephone number. This program shall be in place or than the effective date of this permit. Complaints shall be ided to in accordance with S7.C.8.b.vii. and ix., below.
11 12 13 14 15 16	v i .	Permit All Re permit for mo	ermittee shall conduct on-going screening for illicit connections, ing indicator monitoring, and tracking discharges to the source. The tee shall conduct an ongoing program to identify illicit connections. In gulated municipalities (including those covered under other municipal solutions) within the same WRIA are encouraged to pool municipal resources are cost effective and coordinated implementation of this permit resibility.
18 19 20		(1)	City of Seattle and City of Tacoma shall schedule the screening for illicit discharges such that all of the City's municipal separate storm sewers are screened at least once during the term of this permit.
21 22 23 24 25 26		(2)	Snohomish, King, Pierce and Clark Counties shall schedule the screening program such that all the municipal separate storm sewers located in one half the area of the County within <i>urban/higher</i> density rural subbasins [see definition inserted in definitions section] growth boundaries and urbanized areas are screened during the term of this permit.
27 28	vi i .		ning for illicit discharges shall be conducted using one or more of the ds listed below:
29		(1)	The field screening method in 40 CFR 122.26(d)(1)(iv).
30 31 32		(2)	Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, October 2004.
33		(3)	Other alternative methods that have been approved by Ecology.
34	vii i .	Respo	nse to Illicit Connections
35 36 37 38 39		(1)	Investigation: Upon discovery or upon receiving a report of a suspected illicit connection, Permittees shall initiate an investigation within 21 days, to determine the source of the connection, the nature and volume of discharge through the connection, and the responsible party for the connection.

1 2 3	(2) Termination: Upon confirmation of the illicit nature of a storm drain connection, Permittees shall ensure termination of the connection within 180 days, using enforcement authority as needed.
4 5 6 7	(3) A Permittee may refer illicit connection violations to Ecology provided that the Permittee has made a good faith effort of progressive enforcement which would include documentation of two follow-up inspections and two warning letters or notices of violation.
8 9 10 11 11 12 13 14 15 16 17 18 19 20	viiix. Each Permittee, no later than 6 months after the effective date for this permit, shall develop and implement procedures to prevent, respond to and clean up spills and improper disposal into municipal separate storm sewers owned or operated by the Permittee. Under these procedures, each Permittee shall investigate, within 7 days on average, any complaints/reports or monitoring information that indicates a potential illicit discharge, including a spill or illegal dumping. Permittees shall also investigate as soon as possible, within 24 hours, those problems/violations judged by the Permittee to be urgent or severe, or reported as an emergencyies. All Regulated municipalities (including those covered under other municipal permits) within the same WRIA are encouraged to pool municipal resources for more cost effective and coordinated implementation of this permit responsibility.
21 22 23 24	ix. Each Permittee shall track and maintain records of the illicit discharge detection and elimination program, including documentation of inspections, complaint/spill response and other enforcement records.
25	9. Operation and Maintenance Program
26 27 28 29 30	a. The SWMP shall include a program to conduct maintenance activities that prevent or reduce stormwater impacts. All Regulated municipalities (including those covered under other municipal permits) within the same WRIA are encouraged to pool municipal resources for more cost effective and coordinated implementation of this permit responsibility. The program shall include:
31 32	 Maintenance standards and programs to ensure proper and timely maintenance of public and private stormwater facilities.
33 34	ii. Practices for operating and maintaining public streets, roads, and highways to reduce stormwater impacts.
35 36 37	 Policies and procedures to reduce pollutants associated with the application of pesticides, herbicides, and fertilizer by the Permittee's agencies or departments.
38 39	iv. Practices for reducing stormwater impacts from <i>heavy equipment</i> maintenance or storage yards, and from material storage facilities.
40	b. Minimum Performance Measures:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	
19 20 21 22 23 24 25	
26 27 28 29 30 31	
32 33 34 35 36 37 38 39 40	
41 42	

i. Maintenance Standards. No later than 12 months after the effective date of this permit, each Permittee must establish maintenance standards that are as protective or more protective of facility function than those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington.

The facility-specific maintenance standards are intended to be conditions for determining if maintenance actions are required as identified through inspection. They are not intended to be measures of the facility's required condition at all times between inspections. Exceeding these conditions at any time between inspections and/or maintenance does not automatically constitute a violation of these standards. However, based upon inspection observations, the inspection and maintenance schedules shall be adjusted to minimize the length of time that a facility is in a condition that requires a maintenance action. These standards are violated when an inspection identifies a required maintenance action related to facility function, and that action is not performed in a timely manner, for example, within 90-180 days for typical maintenance, within 6-9 months for revegetation, and within 1 year for maintenance that requires capital construction of less than \$25,000.

- ii. Maintenance of stormwater facilities regulated by the Permittee
 - (1) No later than 6 months after the effective date of this permit, each Permittee shall update existing ordinances or other enforceable documents requiring maintenance of all permanent stormwater treatment and flow control facilities regulated by the Permittee, in accordance with maintenance standards established under S7.C.9.b.i, above.
 - (2) No later than 12 months after the effective date of this permit, each Permittee shall develop and implement an initial inspection schedule for all stormwater treatment and flow control facilities regulated by the Permittee that ensures inspection of each facility at least once during the term of this permit to enforce compliance with adopted maintenance standards as needed based on the inspection.
 - (3) No later than 48 months after the effective date of this permit, each Permittee shall develop an on-going inspection schedule for implementation after the initial schedule to ensure annual inspections of all stormwater treatment and flow control facilities regulated by the Permittee. The annual inspection schedule may be changed to a lesser or greater frequency of inspection, as appropriate to ensure compliance with maintenance standards, based on maintenance records of double the length of time of the proposed inspection frequency.
 - (4) No later than 24 months after the effective date of this permit each Permittee shall manage maintenance activities to inspect all new permanent stormwater treatment and flow control facilities in new

1 2 3 4		residential developments every 6 months during the period of heaviest house construction (i.e., 1 to 2 years following subdivision approval) to identify maintenance needs and enforce compliance with maintenance standards as needed.
5 6 7	(5)	Compliance with the inspection requirements of S7.C.9.b.ii.(2),(3), and (4), above, shall be determined by the presence of an established inspection program designed to inspect all sites.
8	iii. Mainte	nance of stormwater facilities owned or operated by the Permittee
9 10 11 12 13 14 15 16	(1)	No later than 24 months after the effective date of this permit each Permittee shall begin implementing a program to inspect all stormwater treatment and flow control facilities annually and take appropriate maintenance action in accordance with adopted maintenance standards. The annual inspection schedule may be changed to a lesser or greater frequency of inspection as appropriate to ensure compliance with maintenance standards based on maintenance records of double the length of time of the proposed inspection frequency.
18 19 20 21 22 23 24 25 26	(2)	No later than 24 months after the effective date of this program each Permittee shall begin implementing a program to conduct spot checks of potentially damaged treatment and flow control facilities after major storm events. If spot checks indicate widespread damage/maintenance needs, inspect all stormwater treatment and flow control facilities that may be affected. Conduct repairs or take appropriate maintenance action in accordance with maintenance standards established under S7.C.9.b.i, above, based on the results of the inspections.
27 28 29	(3)	Compliance with the inspection requirements of S7.C.9.b.iii.(1) and (2), above, shall be determined by the presence of an established inspection program designed to inspect all sites.
30	iv. Catch I	Basin Maintenance
31 32 33 34 35 36 37 38 39 40	(1)	No later than 24 months after the effective date of this permit each Permittee shall begin implementing a program to annually inspect catchbasins and inlets owned or operated by the Permittee. Inspections may be conducted on a "circuit basis" whereby a sampling of catchbasins and inlets within each circuit is inspected to identify maintenance needs. Include in the sampling an inspection of the catchbasin immediately upstream of any system outfall. Clean all catchbasins within a given circuit at one time if the inspection sampling indicates cleaning is needed to comply with maintenance standards established under S7.C.9.b.i, above. As an alternative to inspecting catchbasins on a "circuit basis," the Permittee may inspect
42		all catchbasins, and clean only catchbasins where cleaning is needed

1 2 3		to comply with maintenance standards. The disposal of decant water shall be in accordance with the requirements in Appendix 7, which is by this reference as if set forth fully herein.
4 5 6		(2) The Permittee shall require cleaning of private catchbasins and inlets whenever they are found to be out of compliance with adopted maintenance standards.
7 8	v.	Records of inspections and maintenance or repair activities conducted by the Permittee shall be maintained.
9 10 11 12 13	vi.	Establish practices to reduce stormwater impacts associated with runoff from public parking lots, public streets, public roads, highways, and road maintenance activities within 12 months of the effective date of this permit. Adoption of the Regional Road Maintenance Endangered Species Act Program Guidelines will be considered to meet this permit requirement.
14 15 16		Implementation of practices shall begin no later than 18 months after the effective date of this permit, and continue on an ongoing basis throughout the term of the permit. The following activities must be addressed:
17		(1) Pipe cleaning
18		(2) Cleaning of culverts that convey stormwater in ditch systems
19		(3) Ditch maintenance
20		(4) Street cleaning
21		(5) Road repair and resurfacing, including pavement grinding
22		(6) Snow and ice control
23		(7) Utility installation
24		(8) Maintaining roadside areas, including vegetation management.
25		(9) Dust control
26		(10) Pavement striping maintenance
27 28 29 30 31 32 33	vii.	No later than 12 months after the effective date of this permit, each Permittee shall establish and implement policies and procedures to reduce pollutants in discharges from all lands owned or maintained by the Permittee, including but not limited to: parks, open space, road right-of-ways, maintenance yards, and at stormwater treatment and flow control facilities. These policies and procedures must address, but are not limited to:
34 35 36		 Application of fertilizer, pesticides, and herbicides, including the development of an Integrated Pest Management Program (see <u>S7.C.9.b.viii below for details</u>)
37		Sediment and erosion control

1	 Landscape maintenance and vegetation disposal
2	• Trash management
3	Building exterior cleaning and maintenance
4 5 6 7 8 9	viii [Moved from S7.C.7.b.v. and revised to read as follows] No later than 12 months after the effective date of this permit, adopt and implement policies and procedures to reduce pollutants associated with the application of pesticides, herbicides, fungicides, and fertilizer on all public property owned or managed by the Permittee, including parks and road right-of-ways. The program shall include the following, at a minimum:
10 11	(1) Identify and quantify all pesticides, herbicides, fungicides, and fertilizer used by the Permittee;
12 13 14	(2) Identify application practices of each restricted use pesticide or any pesticide applied by power equipment: location, timing and application rates;
15 16 17 18	(3) Use reasonable efforts to avoid application of pesticides, herbicides, fungicides, or fertilizers immediately before a rain event, and ensure no application during or immediately after a rain event, or when water is flowing off the area to be applied;
19 20 21	(4) Ensure that staff applying pesticides or herbicides follow label directions and, when required by the Washington State Department of Agriculture, have a valid pesticide license;
22 23 24	(5) Implement procedures to use and manage herbicides, pesticides, fungicides, and fertilizer consistent with the adopted source control BMPs.
25 26 27 28	viiix. Conduct a minimum of 2 training sessions, during the term of the permit, No later than 24 months after the effective date of this permit, develop and implement an ongoing training program for appropriate employees of the Permittee whose construction, operations or maintenance
29 30 31 32	job functions may impact stormwater quality. This training program shall address the importance of protecting water quality, the requirements of this permit, operation and maintenance standards, inspection procedures, selecting appropriate BMPs, ways to perform their job activities to prevent
31 32 33 34 35 36 37	or minimize impacts to water quality, and procedures for reporting water quality concerns, including potential illicit discharges. <u>Documentation of the training provided and the employees trained shall be included in the third annual report and every annual report thereafter. All Regulated municipalities (including those covered under other municipal permits)</u>
38 39 40	within the same WRIA are encouraged to pool municipal resources for more cost effective implementation of this training program. The first training session shall be completed no later than 2 years after the effective

1 2	date of this permit; the second training session shall be completed no later than the end of the permit term.
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee, that are not covered under the Industrial Stormwater General permit. The SWPPP is a documented plan to implement measures to identify, prevent, and control the contamination of discharges of stormwater to surface or ground water. The SWPPPs must be developed within 18 months of the effective date of this permit. Implementation of non-structural BMPs shall begin immediately after the pollution prevention plan is developed. A schedule for implementation of structural BMPs shall be included in the SWPPP. Generic SWPPs that can be applied at multiple sites may be used to comply with this requirement. The SWPPP shall include periodic visual observation of stormwater outfalls and receiving water in close proximity of known stormwater outfalls, during a storm event, to evaluate the effectiveness of BMPs.
18 19	10. Education and Outreach Program
20 21 22 23 24 25 26 27 28	a. The SWMP shall include an education <u>and outreach</u> program aimed at residents, businesses, industries, elected officials, policy makers, planning staff and other employees of the Permittee. The goal of the education <u>and outreach</u> program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. An education <u>and outreach</u> program may be developed locally or regionally. <u>All Regulated municipalities (including those covered under other municipal permits) within the same WRIA are encouraged to pool municipal resources for more cost effective and coordinated implementation of this permit responsibility.</u>
29	b. Minimum Performance Measures:
30 31 32 33 34	i. No later than 12 months after the effective date of this permit, each the Permittee shall implement or participate in an education and outreach program that uses different types of media (brochures alone are not adequate), and targets a wide range of interest groups to meet the education objectives provide education on the topics listed in iii, below.
35 36 37	ii. The education <u>and outreach program shall address the following topics and target audiences</u> meet all of the following objectives by the expiration date of <u>this permit</u> :
38 39 40 41	(1) Provide education opportunities for all audiences about the importance of improving water quality, reducing impervious surfaces, and protecting beneficial the existing and designated uses of waters of the state, about potential impacts caused by stormwater discharges, and

2	methods for avoiding, minimizing, reducing and/or eliminating the adverse impacts of stormwater runoff.
3 (2)	2) Provide and encourage <u>public</u> participation in environmental stewardship activities.
5 (1) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	Provide information to the general public about actions individuals can take to improve water quality and reduce impervious surfaces (e.g., lawn care with less fertilizer and pesticides, more use of native vegetation for landscaping, proper disposal of pet wastes, etc.) and reduce the runoff effects of impervious surface (e.g., use of permeable pavement, pervious surface absorption, etc.).
11 (4 12	4) Provide information to the general public on proper use and disposal of pesticides, herbicides, and fertilizers.
13 (: 14 15 16 17	5) Provide information to engineers, construction contractors, developers, development review staff, and land use planners on technical standards, the development of stormwater site plans and erosion control plans, and BMPs for mitigating contaminated runoff and the quantity of runoff from development sites.
18 (e 19 20 21	Provide information to engineers, contractors, developers, and the public on land development practices and non-structural BMPs, such as Low Impact Development, that eliminate, avoid, or minimize adverse stormwater impacts.
22 23 24	7) Provide information to the general public that explains illicit discharges and their impacts, and promotes their removal to explain the definition and impacts, and promote removal of illicit discharges.
25 (1) 26 27	8) Provide information to <u>the general public that promotes</u> proper management and disposal of toxic materials (e.g. used oil, batteries, vehicle fluids, home chemicals.)
28 (9 30 31	Provide information to commercial target audiences businesses and home owners that promotes implementation of source control BMPs to reduce the discharge of pollutants from business and residential activities in coordination with the source control inspection program.
33	Each Permittee shall develop and implement a public education and outreach program designed to reach 100% of the target audiences identified in S7.c.10.b.ii., above, within their jurisdiction, by the expiration date of this permit.
	Each permittee shall track and maintain records of public education and <u>outreach</u> activities.
	nate Minimum Performance Measures. The permittee may comply with llowing measures in lieu of those in S7.10.b. above:

1 2 3 4 5 6 7 8	<u>i.</u> ii.	No later than 12 months after the effective date of this permit, the Permittee shall implement or participate in an education and outreach program that uses a variety of methods targeting the audiences and topics listed in ii. below. The outreach program shall be designed to achieve measurable improvements in each target audience's understanding of the problem and what they can do to solve it and measurable improvements in the percentage of each target audience regularly carrying out the intended action or behavior change. The education and outreach program shall increase regular adoption of the
10 11	п.	following behaviors in the following target audiences by the expiration date of this permit:
12 13 14 15 16 17 18		(1) Provide information about the importance of improving water quality, reducing impervious surfaces, and protecting the existing and designated uses of waters of the state and the potential impacts caused by stormwater discharges, and promote specific actions and opportunities for avoiding, minimizing, reducing and/or eliminating the adverse impacts of stormwater runoff, especially through the use of source control BMPs.
19 20 21 22 23		(2) Promote the use of natural yard care techniques (e.g. composting lawn and yard clippings, using compost and mulch, using natural organic fertilizers, watering infrequently and deeply) among homeowners, the general public, landscape professionals, and property managers to protect water quality.
24 25 26 27		(3) Encourage homeowners, the general public, landscape professionals, and property managers to protect water quality by reducing their purchase of and properly storing, using and disposing of pesticides, fertilizers, and other yard care chemicals.
28 29 30 31 32 33		(4) Encourage the general public and businesses to protect water quality by reducing their purchase of and properly storing, using, and disposing of automotive chemicals, hazardous cleaning supplies, and other hazardous materials, and by facilitating use of source control BMPs that minimize the discharge of soap/detergents (e.g., supplying or providing grant funding for carwash kits, etc.).
34 35 36 37 38		(5) Educate engineers, construction contractors, developers, development review staff, and land use planners to follow technical standards, develop stormwater site plans and erosion control plans, and use Best Management Practices to mitigate contaminated runoff and the quantity of runoff from development sites.
39 40 41 42		(6) Promote the understanding and use of Low Impact Development (LID) techniques (e.g. appropriate site design, pervious paving, full dispersion BMPs, and retention of forests and mature trees) among engineers, contractors, developers, architects, landscape architects,

1 2	realtors, and potential home buyers to avoid or minimize stormwater impacts of new development.
3 4 5	(7) Educate small businesses and the general public about the impacts of illicit discharges and encourage their identification, and removal to avoid impacts to water quality.
6 7 8 9	(8) Involve the general public in environmental stewardship activities (e.g habitat restoration and community involvement and education projects) to increase awareness of the importance of water quality and mitigate, reduce, or eliminate adverse impacts of stormwater runoff.
10 11 12 13 14	iii. Each permittee shall implement or participate in an effort to measure understanding and adoption of the targeted behaviors among the targeted audiences. The resulting measurements shall be used to direct education and outreach resources most effectively as well as to evaluate changes in adoption of the targeted behaviors.
15 16	 <u>iv.</u> Each permittee shall track and maintain records of public education and outreach activities.
17 18	S8. STORMWATER MANAGEMENT PROGRAM FOR CO-PERMITTEES AND SECONDARY PERMITTEES
19 20 21 22 23 24	A. Each Co-Permittee and Secondary Permittee shall implement a stormwater management program (SWMP) during the term of this permit. For the purpose of this permit a SWMP for a Co-Permittee or Secondary Permittee is a set of actions and activities comprising the components in this Special Condition as outlined below. The SWMP shall also include any additional controls identified in Appendix 6 of this permit which are necessary to meet applicable TMDL requirements.
25 26	 S8.B Coordination, and S8.C Legal Authority are applicable to all Co-Permittees and Secondary Permittees covered under this permit.
27	2. S8.D is applicable only to Port Districts Covered under this Permit.
28 29	3. S8.E is applicable only to King County as a Co-Permittee with the City of Seattle for MS4s owned by King County but located within the City of Seattle.
30	4. S8.F is applicable all other Secondary Permittees excluding Port Districts.
31	B. Coordination
32 33 34 35 36 37	The SWMP for all Co-Permittees and Secondary Permittees shall include mechanisms among Permittees, Co-Permittees, and Secondary Permittees to encourage coordinated stormwater-related policies, programs and projects within a watershed and interconnected municipal separate storm sewers. Where relevant and appropriate, the SWMP shall also include coordination among departments within each jurisdiction to ensure compliance with the terms of this permit.

1 No later than 6 months after receiving coverage under this permit the SWMP shall 2 provide for appropriate coordination with the City and County in which the Secondary 3 Permittee or Co-Permittee is located. 4 C. Legal Authority 5 To the extent allowable under state law, all Co-Permittees and Secondary Permittees 6 shall operate pursuant to adequate legal authority which authorizes or enables the 7 Secondary Permittee and Co-permittee to control discharges to and from municipal 8 separate storm sewers owned or operated by the Secondary Permittee. 9 This legal authority, which may be a combination of statute, ordinance, permit, 10 contracts, orders, interagency agreements, or similar means, shall include the ability to: 11 1. Control the contribution of pollutants to municipal separate storm sewers owned or 12 operated by the Co-Permittee or Secondary Permittee from stormwater discharges 13 associated with industrial activity, and control the quality of stormwater discharged 14 from sites of industrial activity, and control the quality of stormwater discharged 15 from sites of industrial activity into the Permittees municipal separate storm sewer 16 2. Prohibit illicit discharges to the municipal separate storm sewer owned or operated 17 by the Co-Permittee or Secondary Permittee; 18 3. Control the discharge of spills and the dumping or disposal of materials other than 19 stormwater into the municipal separate storm sewers owned or operated by the Co-20 Permittee or Secondary Permittee; 21 4. Control the contribution of pollutants from one portion of the municipal separate 22 storm sewer system to another portion of the municipal separate storm sewer 23 system; 24 5. Require compliance with conditions in ordinances, permits, contracts, or orders; 25 and. 26 6. Carry out inspection, surveillance, and monitoring procedures necessary to 27 determine compliance and non-compliance with permit conditions, including the 28 prohibition on illicit discharges to the municipal separate storm sewer. 29 D. Stormwater Management Program for Port Districts: 30 1. Gathering, Maintaining, and Using Adequate Information. The SWMP shall include 31 an ongoing program for gathering, maintaining, and using adequate information to conduct planning, priority setting, and program evaluation activities for Port-owned 32 33 properties. 34 Minimum Performance Measures. The following information will be gathered and 35 retained: 36 a. Mapping of known municipal separate storm sewer outfalls, and maps depicting 37 land use for property owned by the Port district, and all other properties served 38 by municipal separate storm sewers owned or operated by the Port. The

1 2		mapping shall be completed within 18 months of receiving coverage under this permit.
3 4 5		b. Mapping of tributary conveyances, and the associated drainage areas of <i>major municipal separate storm sewer outfalls</i> , will be completed within 2 years of the effective date of this permit.
6 7 8 9 10		c. Each Port shall make available to Ecology, upon request, GIS data layers depicting outfall locations, land use, tributary conveyances and associated drainage areas of major outfalls. GIS data shall be submitted in the format specified by Ecology at: http://www.ecy.wa.gov/services/gis/data/standards.htm.
11 12 13 14		c. No later than 18 months after receiving coverage under this permit, develop and implement a program to maintain operation and maintenance records for stormwater management facilities, indicating the date, what actions were taken and where wastes were disposed of. The information shall be available for inspection.
16 17		d. Upon Request, mapping information and operation and maintenance records shall be provided to the City or County in which the Port is located.
18		
19 20 21 22 23 24 25 26 27	2.	Source Control in existing Developed Areas. The SWMP shall include a program to address impacts caused by stormwater discharges from areas of existing development through the development and implementation of Stormwater Pollution Prevention Plans (SWPPPs). SWPPPS shall be prepared and implemented for all Port-owned lands with potential pollutant-generating sources (see Appendix 3, for definition of pollutant-generating sources) that are not covered under the Industrial Stormwater General Permit, the Boatyard General Permit or an individual NPDES permit that covers stormwater discharges, and that could contribute pollutants to municipal separate storm sewers owned or operated by the Port.
28		Minimum Performance Measures
29 30 31 32		a. SWPPs must be developed for applicable properties within 18 months of receiving coverage under this permit. The SWPPP is a documented plan to implement measures to identify, prevent, and control the contamination of discharges of stormwater to surface or ground water.
33 34		b. The SWPPP shall include a facility assessment including a site plan, identification of pollutant sources and description of the drainage system.
35 36 37 38 39 40		c. The SWPPP shall include a description of the BMPs necessary for the site to eliminate or reduce stormwater contamination and, if necessary, regulate peak flow and volume of stormwater discharge. Implementation of non-structural BMPs shall begin immediately after the pollution prevention plan is developed. A schedule for implementation of structural BMPs shall be included in the SWPPP. Generic SWPPPs that can be applied at multiple sites may be used to comply with this requirement.

1 d. The Port shall maintain a list of sites for which SWPPPs are required under this 2 permit. At least 15% of the listed sites shall be inspected annually, and 80% of 3 the total number of listed properties will be inspected during the term of the 4 permit. 5 e. The SWPPPs shall include policies and procedures to reduce pollutants 6 associated with the application of pesticides, herbicides and fertilizer. 7 f. The SWPPPs shall include measures to prevent, identify and respond to illicit 8 discharges, including illicit connections, spills and improper disposal. 9 Immediately upon becoming aware of a spill into the drainage system owned or 10 operated by the Port, the Port shall notify the City or County it is located in, and notify Ecology. 11 12 g. The SWPPPs shall include a component related to inspection and maintenance 13 of stormwater treatment and flow control facilities, and catchbasins, that is consistent with the Port's Operation and Maintenance Program, as specified in 14 3., below. The SWPPP will address appropriate training for maintenance staff. 15 16 Records of inspections and maintenance activities shall be maintained. 17 3. Operation and Maintenance Program. The SWMP shall include an operation and maintenance program for all stormwater treatment and flow control facilities, and 18 19 catchbasins to ensure that BMPs continue to function properly. 20 Minimum Performance Measures: 21 a. Each Port must prepare an operation and maintenance manual for all 22 stormwater treatment and flow control BMPs that are owned or maintained by the Port. The deadline for preparing the maintenance manual is 18 months after 23 24 receiving coverage under this permit. A copy of the manual shall be retained in 25 the appropriate Port department. The operation and maintenance manual shall establish facility-specific maintenance standards that are as protective, or more 26 27 protective than those specified in Chapter 4 of Volume V of the 2001 28 Stormwater Management Manual for Western Washington. 29 The facility-specific maintenance standards are intended to be conditions for 30 determining if maintenance actions are required as identified through inspection. They are not a measure of the facilities required condition at all 31 32 times between inspections. Exceeding the maintenance standards between 33 inspections and/or maintenance does not automatically constitute a violation of these standards. However, based upon inspection observations, the inspection 34 and maintenance schedules shall be adjusted to minimize the length of time that 35 a facility is in a condition that requires a maintenance action. These standards 36 37 are violated when an inspection identifies a required maintenance action, and that action is not performed within 90 days for typical maintenance, within 6 38 months for re-vegetation, and within 1 year for maintenance that requires capital 39 40 construction.

1 2 3 4 5 6 7		b. Each Port will manage maintenance activities to inspect all stormwater treatment and flow control BMPs annually and take appropriate maintenance action in accordance with the operation and maintenance manual. The annual inspection schedule may be changed to a lesser or greater frequency of inspection as appropriate to ensure compliance with maintenance standards based on maintenance records of double the length of time of the proposed inspection frequency.
8		c. The Port shall provide appropriate training for Port maintenance staff.
9 10 11 12		4. Education Program. The SWMP shall include an education program aimed at tenants and Port employees. The goal of the education program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.
13		Minimum Performance Measure:
14 15 16		a. No later than 18 months after receiving coverage under this permit, all tenant and Port employees whose job duties could negatively impact stormwater will receive educational materials.
17 18		5. Monitoring Program. The monitoring requirements for the Port of Seattle and Port of Tacoma are included in Special Condition S6.
19	E.	Stormwater Management Program for King County as a Co-Permittee
20 21 22 23 24 25		King County as a Co-Permittee with the City of Seattle for the Densmore Metro Drainage Basin, as defined in the Memorandum of Agreement between the City and King County dated September 25, 1995, shall participate in the City of Seattle's Stormwater Management Program in accordance with the Joint Stormwater Management Program element of the Memorandum of Agreement. The Joint Stormwater Management Program shall at a minimum include the following:
26		1. Stormwater controls for areas of existing development consistent with S7.C.6.
27		2. A source control program consistent with S7.C.7.
28		3. An illicit discharge reduction program consistent with S7.C.8.
29		4. An operation and maintenance program consistent with S7.C.9.
30		5. A public education program consistent with S7.C.10.
31	F.	Stormwater Management Program for Secondary Permittees
32 33 34 35 36		All other Secondary Permittees shall develop and implement the following Stormwater Management Program. The term "all other Secondary Permittees" means drainage, diking, flood control, or diking and drainage districts, and any other owners or operators of municipal separate storm sewers located within the municipalities that are listed as Permittees in special condition S1.B.

1 The SWMP shall be designed to reduce the discharge of pollutants from regulated small 2 MS4s to the maximum extent practicable and protect water quality. A SWMP is a set 3 of actions and activities comprising the components listed in S8.F.1 through S8.F.6, 4 below. Unless an alternate deadline is provided below, all components of the SWMP 5 shall be fully developed and implemented within 5 years of receiving coverage under this permit. 6 7 1. Public Education and Outreach 8 Secondary Permittees must develop and implement a public education and outreach 9 program. The program shall distribute educational materials or conduct equivalent 10 outreach activities to educate the public, businesses and other entities in the area served 11 by the Secondary Permittees MS4. 12 The minimum performance measures are: 13 a. Each Secondary Permittee shall identify at least one target audience served by the 14 Secondary Permittees MS4 for stormwater education and will provide appropriate information to that audience about proper stormwater management to prevent 15 16 water quality impacts. 17 b. The target audience(s) must be identified within one year from the date of permit 18 coverage; an outreach strategy designed to reach 100% of the identified target 19 audience must be developed and implemented within four years from the date of permit coverage. This requirement may be met by participating in the education 20 program of the permitted jurisdiction that the secondary permittee is located 21 22 within. 2. Public Involvement 23 24 At a minimum, Secondary Permittees must comply with applicable State, tribal and 25 local public notice requirements when implementing a public involvement and 26 participation program. The SWMP shall include ongoing opportunities for public 27 involvement and participation through advisory panels, public hearings, watershed 28 committees, participation in developing rate-structures, stewardship programs, 29 environmental activities, volunteer opportunities, or other similar activities. 30 3. Illicit Discharge Detection and Elimination 31 The SWMP shall include measures to prevent, identify and respond to illicit discharges, 32 including illicit connections, spills, and improper disposals, which shall include 33 appropriate inspections and reports, and appropriate training and procedures to be used 34 by field staff to recognize, report, and respond to, illicit discharges.

a. From the date of permit coverage, comply with all relevant ordinances, rules, and

regulations of the local jurisdiction(s) in which the Secondary Permittee is located

The minimum performance measures are:

35

36

1 2	that govern discharges into the local jurisdictions municipal separate storm sewer system.
3 4 5 6 7 8	b. Develop and enforce appropriate policies prohibiting illicit discharges and illegal dumping. Identify possible enforcement mechanisms within one year from the date of permit coverage; and, within eighteen months from the date of permit coverage, develop and implement an enforcement plan using these mechanisms to ensure compliance with illicit discharge policies adopted by the Secondary Permittee.
9 10 11 12 13 14	c. Develop a map of the municipal separate storm sewer system owned or operated by the Secondary Permittee within 2 years from the date of permit coverage. The map shall include all known storm drain outfalls to waters of the state and the name of the receiving water body or discharge points into adjacent MS4s. The map shall also include all known tributary conveyances, and their associated drainage areas, for all areas served by the MS4 owned or operated by the Secondary Permittee.
16 17 18 19	The storm sewer map shall be provided to the City or County in which the Secondary Permittee is located, upon the request of those entities. In accordance with S7.C.2, Secondary Permittees may request mapping information from other entities covered under this permit.
20 21	d. By the end of the permit term, develop and implement a spill response plan that includes coordination with a qualified spill responder.
22 23 24 25	e. Provide staff training or coordinate with existing training efforts to educate relevant staff on proper best management practices for identifying and preventing spills and illicit discharges. All relevant staff must be trained by the end of the permit term.
26 27 28	f. Identify areas of industrial activity served by the Secondary Permittee's MS4 that require coverage under the Industrial General Permit, determine whether coverage has been obtained, and inform the Department if coverage has not be obtained.
29	4. Construction Site Stormwater Runoff Control
30 31 32	The SWMP shall include a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that meet the thresholds in Appendix 1 of this permit.
33	The minimum performance measures are:
34 35 36	a. From the date of permit coverage, comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the secondary permittee is located that govern construction phase stormwater pollution prevention measures.
37 38 39	b. From the date of permit coverage, seek coverage under the General NPDES Permit for Stormwater Discharges Associated with Construction Activities, when applicable.

1 2 3	c. Provide training or coordinate with existing training efforts to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.
4 5	 Post-Construction Stormwater Management for New Development and Redevelopment
6 7 8 9	The SWMP shall include a program to address post-construction stormwater runoff from new development and redevelopment projects that meet the thresholds in Appendix 1 of this permit. The program must ensure that controls are in place that would prevent or minimize water quality impacts.
10	The minimum performance measures are:
11 12 13	a. From the date of permit coverage, comply with all relevant ordinances, rules and regulations of the local jurisdiction(s) in which the secondary permittee is located that govern post-construction stormwater pollution prevention measures, including proper operation and maintenance of the MS4.
15 16 17 18	b. Provide for the post-construction stormwater controls included in Appendix 1 to be included on all new construction and other land-disturbing projects and ensure that qualified staff or contractors design post-construction stormwater controls as necessary to protect water quality on all projects.
19	6. Pollution Prevention and Good Housekeeping
20 21 22 23 24 25	All permittees must develop and implement an operation and maintenance program (O&M Plan) that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations into MS4s. Within three years from the date of permit coverage, each Secondary Permittee shall develop a municipal O&M Plan. The O&M plan shall be fully implemented no later than five years from the date of permit coverage.
26	The minimum performance measures are:
27 28 29 30 31 32 33 34	 a. The O&M Plan shall include appropriate pollution prevention and good housekeeping procedures for the following activities and/or types of facilities carried out, or under the functional control of the of the Secondary Permittee: Stormwater collection and conveyance system maintenance Drainage/ditch system maintenance Structural stormwater controls Roads, highways, and parking lots Vehicle fleets (storage, washing, and maintenance) Equipment storage and maintenance areas
35 36 37	 Equipment storage and maintenance areas Material storage areas Parks and open space
38 39	 Other facilities that that would reasonably be expected to discharge contaminated runoff

1 2 3 4 5 6 7 8	b.	The O&M plan shall include pollution prevention/good housekeeping practices at all park areas and other open spaces maintained by the Secondary Permittee. The O&M Plan must address, but is not limited to: • Application of fertilizer, pesticides, and herbicides • Sediment and erosion control • Landscape maintenance and vegetation disposal • Trash management • Building exterior cleaning and maintenance
9 10 11 12 13	c.	The O&M Plan shall include provisions for the regular inspection and maintenance of post-construction structural BMPs. The O&M Plan shall establish facility-specific maintenance standards that are as protective or more protective than those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington.
14 15 16 17 18 19 20 21 22 23 24		The facility-specific maintenance standards are intended to be conditions for determining if maintenance actions are required as identified through inspection. They are not a measure of the facility's required condition at all times between inspections. Exceeding the maintenance standards between inspections and/or maintenance does not automatically constitute a violation of these standards. However, based upon inspection observations, the inspection and maintenance schedules shall be adjusted to minimize the length of time that a facility is in a condition that requires a maintenance action. These standards are violated when an inspection identifies a required maintenance action, and that action is not performed within 90 days for typical maintenance, within 6 months for revegetation, and within 1 year for maintenance that requires capital construction of less than \$5,000.
26 27 28 29 30 31	d.	Secondary Permittees shall annually inspect all post construction stormwater BMPs. The annual inspections program shall begin no later than three years from the date of permit coverage. The annual inspection schedule may be changed to a lesser or greater frequency of inspection as appropriate to ensure compliance with maintenance standards based on maintenance records of double the length of time of the proposed inspection frequency.
32 33 34 35	e.	Secondary Permittees shall properly maintain stormwater collection and conveyance systems, including but not limited to: regular inspections, cleaning, proper disposal of waste removed from the system (per Appendix 7), and record keeping.
36 37 38 39	f.	From the effective date of permit coverage, Secondary Permittees shall identify, and submit a Notice of Intent for permit coverage for all facilities operated by the Secondary Permittee that are required to be covered under the General NPDES Permit for Stormwater Discharges Associated with Industrial Activities.
40 41 42	g.	Secondary Permittees shall provide appropriate training for employees of the Secondary Permittee whose construction, operations, or maintenance job functions may impact stormwater quality. Training shall address the importance

1 2 3 4 5	of protecting water quality, the requirements of this permit, operation and maintenance requirements, inspection procedures, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns, including potential illicit discharges.
6	S9. REPORTING REQUIREMENTS
7 8 9	A. Each Permittee, co-Permittee and secondary Permittee shall submit, no later than March 31 of each year beginning in the year 2007, an annual report. The reporting period for each annual report shall be the previous calendar year.
10	B. The annual report shall include the following information:
11 12 13 14 15 16 17 18	1. Status of compliance with the conditions of this permit, including the status of implementing the components of the stormwater management program, and the implementation schedule. If permit deadlines are not met, Permittees, co-Permittees and secondary Permittees shall report the reasons why the requirement was not met and how the requirements will be met in the future, including projected implementation dates. A comparison of program implementation results to performance standards established in this permit shall be included for each program area.
19 20 21	Notification of any recent or proposed annexations or incorporations resulting in an increase or decrease in permit coverage area, and implications for the stormwater management program
22 23	3. Expenditures for the reporting period, with a breakdown for the components of the stormwater management program.
24 25 26	 A summary describing compliance activities, including the nature and number of official enforcement actions, inspections, and types of public education activities; and
27	5. Identification of known water quality improvements or degradation.
28	
29	C. Report Format
30 31 32 33 34	Each Permittee, co-Permittee or secondary Permittee shall use the attached reporting forms, in Appendix 8, which is by this reference as if set forth fully herein. Each Permittee shall complete the applicable form in its entirety. Two copies of the annual report shall be submitted to Ecology. In addition, an electronic copy of the report, in pdf format, shall be submitted to Ecology
35 36 37	

3

4

5

6

7

8

9

10

11

22

23

2425

2627

28

29

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit.

G2. PROPER OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control to achieve compliance with the terms and conditions of this permit.

G3. NOTIFICATION OF SPILL

- 12 If a Permittee has knowledge of a spill into a municipal storm sewer which could constitute
- a threat to human health, welfare, or the environment, the Permittee shall notify the
- Ecology regional office and other appropriate spill response authorities immediately but in
- no case later than within 24 hours of obtaining that knowledge. Spills which might cause
- bacterial contamination of shellfish, such as might result from broken sewer lines, shall be
- reported <u>immediately</u> to the Department of Ecology and the Department of Health,
- Shellfish Program. The Department of Ecology's Regional Office 24-hr. number is 425
- 19 649-7000 for NWRO and 360 407-6300 for SWRO and the Department of Health's
- 20 Shellfish 24-hr. number is 360-236-3330.

21 G4. BYPASS PROHIBITED

- The intentional *bypass* of stormwater from all or any portion of a stormwater treatment BMP whenever the design capacity of the treatment BMP is not exceeded, is prohibited unless the following conditions are met:
- A. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the *Clean Water Act (CWA)*; and
 - B. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated stormwater, or maintenance during normal dry periods.
- "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss.

G5. RIGHT OF ENTRY

1

6

7

8

9

23

24

25

26

27

28

- The Permittee shall allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law at reasonable times:
- A. To enter upon the Permittee's premises where a discharge is located or where any records must be kept under the terms and conditions of this permit;
 - B. To have access to, and copy at reasonable cost and at reasonable times, any records that must be kept under the terms of the permit;
 - C. To inspect at reasonable times any monitoring equipment or method of monitoring required in the permit;
- D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities; and
- 12 E. To sample at reasonable times any discharge of pollutants.

13 **G6. DUTY TO MITIGATE**

- The Permittee shall take all reasonable steps to minimize or prevent any discharge in
- 15 violation of this permit which has a reasonable likelihood of adversely affecting human
- health or the environment.

17 **G7. PROPERTY RIGHTS**

This permit does not convey any property rights of any sort, or any exclusive privilege.

19 G8. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the permit shall be construed as excusing the Permittee from compliance with any other applicable federal, state, or local statutes, ordinances, or regulations.

22 **G9. MONITORING**

- A. Representative Sampling:
- Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored discharge, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.
- B. Records Retention:
- The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five years. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the *Director*. On request, monitoring data and analysis shall be provided to Ecology.
- 36 C. Recording of Results:

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Test Procedures:

All sampling and analytical methods used to meet the monitoring requirements specified in the approved stormwater management program shall conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136, unless otherwise specified in this permit or approved in writing by Ecology.

E. Flow Measurement:

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations or at a minimum frequency of at least one calibration per year. Calibration records should be maintained for a minimum of three years.

F. Lab Accreditation:

All monitoring data, except for flow, temperature, conductivity, pH, total residual chlorine, and other exceptions approved by Ecology, shall be prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, Chapter 173-50 WAC. Soils and hazardous waste data are exempted from this requirement pending accreditation of laboratories for analysis of these media by Ecology.

G. Additional Monitoring:

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G10. REMOVED SUBSTANCES

With the exception of decant from street waste vehicles, the Permittee shall not allow collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to be resuspended or reintroduced to the storm sewer system or to waters of the state. Decant from street waste vehicles resulting from cleaning stormwater facilities may be reintroduced only when other practical means are not available and only in accordance with the Street Waste Disposal Guidelines in Appendix 7, which is by this reference as if set forth fully herein.

1 G11. SEVERABILITY 2 The provisions of this permit are severable, and if any provision of this permit, or the 3 application of any provision of this permit to any circumstance, is held invalid, the 4 application of such provision to other circumstances, and the remainder of this permit 5 shall not be affected thereby. **G12. REVOCATION OF COVERAGE** 6 7 The director may terminate coverage under this General Permit in accordance with 8 Chapter 43.21B RCW and Chapter 173-226 WAC. Cases where coverage may be terminated include, but are not limited to the following: 9 10 A. Violation of any term or condition of this general permit; 11 B. Obtaining coverage under this general permit by misrepresentation or failure to 12 disclose fully all relevant facts; 13 C. A change in any condition that requires either a temporary or permanent reduction 14 or elimination of the permitted discharge; D. A determination that the permitted activity endangers human health or the 15 environment, or contributes significantly to water quality standards violations; 16 17 E. Failure or refusal of the Permittee to allow entry as required in rcw 90.48.090; 18 F. Nonpayment of permit fees assessed pursuant to rcw 90.48.465; 19 Revocation of coverage under this general permit may be initiated by Ecology or 20 requested by any interested person. 21 G13. TRANSFER OF COVERAGE 22 The director may require any discharger authorized by this general permit to apply for and obtain an individual permit in accordance with Chapter 43.21B RCW and Chapter 23 24 173-226 WAC. **G14. GENERAL PERMIT MODIFICATION AND REVOCATION** 25 26 This general permit may be modified, revoked and reissued, or terminated in accordance with the provisions of WAC 173-226-230. Grounds for modification, 27 revocation and reissuance, or termination include, but are not limited to the following: 28 29 A. A change occurs in the technology or practices for control or abatement of 30 pollutants applicable to the category of dischargers covered under this general 31 permit; 32 B. Effluent limitation guidelines or standards are promulgated pursuant to the CWA or 33 chapter 90.48RCW, for the category of dischargers covered under this general

C. A water quality management plan containing requirements applicable to the

category of dischargers covered under this general permit is approved; or

permit;

34

35

D. Information is obtained which indicates that cumulative effects on the environment from dischargers covered under this general permit are unacceptable.

G15. REPORTING A CAUSE FOR MODIFICATION OR REVOCATION

A Permittee who knows or has reason to believe that any activity has occurred or will occur which would constitute cause for modification or revocation and reissuance under Condition G12, G14, or 40 CFR 122.62 must report such plans, or such information, to Ecology so that a decision can be made on whether action to modify, or revoke and reissue this permit will be required. Ecology may then require submission of a new or amended application. Submission of such application does not relieve the Permittee of the duty to comply with this permit until it is modified or reissued.

G16. APPEALS

- A. The terms and conditions of this general permit, as they apply to the appropriate class of dischargers, are subject to appeal within thirty days of issuance of this general permit, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.
- B. The terms and conditions of this general permit, as they apply to an individual discharger, are appealable in accordance with chapter 43.21b rcw within thirty days of the effective date of coverage of that discharger. Consideration of an appeal of general permit coverage of an individual discharger is limited to the general permit's applicability or nonapplicability to that individual discharger.
- C. The appeal of general permit coverage of an individual discharger does not affect any other dischargers covered under this general permit. If the terms and conditions of this general permit are found to be inapplicable to any individual discharger(s), the matter shall be remanded to ecology for consideration of issuance of an individual permit or permits.
- D. Modifications of this permit are appealable in accordance with chapter 43.21B RCW and chapter 173-226 WAC.

28 G17. PENALTIES

29 40 CFR 122.41(a)(2) and (3), 40 CFR 122.41(j)(5), and 40 CFR 122.41(k)(2) are hereby incorporated into this permit by reference.

31 G18. DUTY TO REAPPLY

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this permit. An expired permit continues in force and effect until a new permit is issued or until Ecology cancels the permit. Only Permittes who have reapplied for coverage under this permit are covered under the continued permit.

G19. CERTIFICATION AND SIGNATURE

- All applications, reports, or information submitted to Ecology shall be signed and certified.
 - A. All permit applications shall be signed by either a principal executive officer or ranking elected official.
 - B. All reports required by this permit and other information requested by Ecology shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 1. The authorization is made in writing by a person described above and submitted to Ecology, and
 - 2. The authorization specifies either an individual or a position having responsibility for the overall development and implementation of the stormwater management program. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
 - C. Changes to authorization. If an authorization under General Condition G19.B.2 is no longer accurate because a different individual or position has responsibility for the overall development and implementation of the stormwater management program, a new authorization satisfying the requirements of General Condition G19.B.2 must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
 - D. Certification. Any person signing a document under this permit shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations."

G20. RECORDS RETENTION

Each Permittee is required to keep all records related to this permit for at least five years.

DEFINITIONS AND ACRONYMS

- 2 "Best Management Practices" ("BMPs") means the schedules of activities, prohibitions of
- 3 practices, maintenance procedures, and structural and/or managerial practices that when used
- 4 singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to
- 5 waters of Washington State.

- 6 "Beneficial uses" means.....
- 7 Bypass" means the diversion of stormwater from any portion of a stormwater treatment facility.
- 8 "CWA" means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act
- 9 or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub.
- 10 L. 95-217, Pub. L. 95-576, Pub. L. (6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.
- "Component" or "Program Component" means the elements of the stormwater management
- program listed in Special Condition S7 or S8.
- 13 "Co-Permittee" means an owner or operator of a municipal separate storm sewer (other than an
- incorporated city) located within a large or medium muncipality, that has co-applied for a permit
- with that municipality, and that is only responsible for permit conditions relating to the discharge
- 16 for which it is operator.
- 17 "Director" means the Director of the Washington State Department of Ecology, or an authorized
- 18 representative.
- 19 "Discharge" [***Edit this definition as shown for use with TEIR 3 & 4 versions of
- 20 Condition S5 comments/edits*** for the purpose of this permit, unless indicated otherwise,
- 21 refers to discharges tofrom Municipal Separate Storm Sewers of the Permittees as well
- as from the MS3s of permittees.
- 23 "Entity" means.....
- 24 "Existing Stormwater Discharge" [***Delete this definition consistent with TIER 1 & 2
- 25 versions of Condition S5 comments/edits***
- 26 "Existing Stormwater Discharge" [***Edit this definition as shown for use with TEIR 3 & 4
- 27 <u>versions of Condition S5 comments/edits***</u>] means a discharge <u>either to or from a municipal</u>
- separate storm sewer constructed or vested before the effective date of this permit, at the point
- 29 where it discharges to receiving waters or to a MS4. An existing stormwater discharge serves is
- 30 one that comes from an area of existing development and does not include new stormwater
- 31 sources or new stormwater outfalls.
- 32 "40 CFR" means Title 40 of the Code of Federal Regulations, which is the codification of the
- 33 general and permanent rules published in the Federal Register by the executive departments and
- 34 agencies of the federal government.

- 1 "General Permit" means a permit which covers multiple dischargers of a point source category
- 2 within a designated geographical area, in lieu of individual permits being issued to each
- 3 discharger.
- 4 "Heavy equipment maintenance or storage yard" means an uncovered area where any heavy
- 5 equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers are
- 6 washed or regularly maintained, or where at least five pieces of heavy equipment are stored
- 7 "Illicit connection" means any man-made conveyance that is connected to a municipal separate
- 8 storm sewer without a permit, excluding roof drains and other similar type connections.
- 9 Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets,
- or outlets that are connected directly to the municipal separate storm sewer system.
- "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed
- 12 entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES
- permit for discharges from the municipal separate storm sewer) and discharges resulting from
- 14 fire fighting activities.
- 15 "Integrated Pest Management" means a coordinated decision-making and action process that
- uses the most appropriate pest control methods and strategy in an environmentally and
- economically sound manner to meet agency programmatic pest management objectives. The
- 18 elements of integrated pest management include:
- 19 (a) Preventing pest problems;
- 20 (b) Monitoring for the presence of pests and pest damage;
- 21 (c) Establishing the density of the pest population, that may be set at zero, that can be tolerated or
- correlated with a damage level sufficient to warrant treatment of the problem based on health,
- 23 public safety, economic, or aesthetic thresholds;
- 24 (d) Treating pest problems to reduce populations below those levels established by damage
- 25 thresholds using strategies that may include biological, cultural, mechanical, and chemical
- 26 control methods and that must consider human health, ecological impact, feasibility, and cost-
- 27 effectiveness; and
- (e) Evaluating the effects and efficacy of pest treatments.
- 29 "Pest" means, but is not limited to, any insect, rodent, nematode, snail, slug, weed, and any form
- of plant or animal life or virus, except virus, bacteria, or other microorganisms on or in a living
- 31 person or other animal or in or on processed food or beverages or pharmaceuticals, which is
- 32 normally considered to be a pest, or which the director of the department of agriculture may
- declare to be a pest.
- 34 "Large Municipal Separate Storm Sewer System (Large MS4)" means all Municipal Separate
- 35 Storm Sewers located in an incorporated place with a population of 250,000 or more, a County
- with unincorporated urbanized areas with a population of 250,000 or more according to the 1990
- decennial census by the Bureau of Census.

- 1 "Low Impact Development" (LID) means a stormwater management and land development
- 2 strategy applied at the parcel and subdivision scale that emphasizes conservation and use of on-
- 3 site natural features integrated with engineered, small-scale hydrologic controls to more closely
- 4 mimic pre-development hydrologic functions.
- 5 <u>"Maintenance" means those actions and activities that are performed to maintain the original line</u>
- 6 and grade, hydraulic capacity, or original purpose of the facility.
- 7 "Major Municipal Separate Storm Sewer Outfall" means a municipal separate storm sewer
- 8 outfall from a single pipe with an inside diameter of 36 inches or more, or its equivalent
- 9 (discharge from a single conveyance other than circular pipe which is associated with a drainage
- area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from
- lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an
- outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its
- equivalent (discharge from other than a circular pipe associated with a drainage area of 12 acres
- or more).
- 15 "Material Storage Facilities" means an uncovered area where bulk materials (liquid, solid,
- granular, etc.) are stored in piles, barrels, tanks, bins, crates, or other means.
- 17 "Medium Municipal Separate Storm Sewer System (Medium MS4)" means all Municipal
- 18 Separate Storm Sewers (MS3s) located in an incorporated place with a population of more than
- 19 100,000 but less than 250,000, or a county with unincorporated urbanized areas of more than
- 20 100,000 but less than 250,000 according to the 1990 decennial census by the Bureau of Census.
- 21 "Municipal Separate Storm Sewer (MS3)" means a conveyance, or system of conveyances
- 22 (including drainage systems associated with roads and municipal streetsroads with drainage
- 23 systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm
- drains): (i) owned or operated by a state, city, town, borough, county, parish, district,
- association, or other public body (created by or pursuant to State Law) having jurisdiction over
- 26 disposal of wastes, storm water, or other wastes, including special districts under State Law such
- as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe
- or an authorized Indian tribal organization, or a designated and approved management agency
- 29 under section 208 of the CWA that discharges to waters of the United States; (ii) designed or
- 30 used for collecting or conveying stormwater; (iii) which is not a combined sewer; and (iv) which
- 31 is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.
- 32 "National Pollutant Discharge Elimination System" (NPDES) means the national program for
- issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and
- imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the
- 35 Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point
- sources. These permits are referred to as NPDES permits and, in Washington State, are
- administered by the Washington Department of Ecology.
- 38 "New Stormwater Discharge" [***Delete this definition consistent with TIER 1 & 2 versions
- 39 of Condition S5 comments/edits***

- 1 "New Stormwater Discharge" [***Edit this definition as shown for use with TEIR 3 & 4
- 2 versions of Condition S5 comments/edits***] includes means the discharge generated by and
- 3 <u>at the discharge point of a new stormwater source, s and or the discharge created by a new</u>
- 4 stormwater outfalls.
- 5 "New Stormwater Outfall" [***Delete this definition consistent with TIER 1 & 2 versions of
- 6 Condition S5 comments/edits***]
- 7 "New Stormwater Outfall" [***Edit this definition as shown for use with TEIR 3 & 4
- 8 versions of Condition S5 comments/edits***] means a municipal separate storm sewer, at the
- 9 point where it discharges to receiving waters, that is vested after the effective date of this permit,
- and is constructed at a location where a municipal separate stormwater discharge did not exist at
- 11 the effective date of the permit. A new stormwater outfall may consist of new stormwater
- 12 sources, existing stormwater sources or a combination of new and existing stormwater sources.
- 13 A new stormwater outfall does not include a replacement of an existing outfall, provided that the
- 14 replacement does not increase the volume, flow rate, or pollutant load of the discharge, and
- 15 discharges to the same water body at approximately the same location.
- 16 "New Stormwater Outfall" [***TIER 5***Edit this definition as shown if the above edit for
- 17 **TEIR 3 & 4 is not acceptable**] means a municipal separate storm sewer, at the point where it
- discharges to receiving waters, that is vested after the effective date of this permit, and is
- 19 constructed at a location where a municipal separate stormwater discharge did not exist at the
- 20 effective date of the permit. A new stormwater outfall may consist of new stormwater sources,
- 21 existing stormwater sources or a combination of new and existing stormwater sources. [Delete
- 22 his sentence because it is confusing and addresses discharges, not structures] A new
- stormwater outfall does not include a replacement of an existing outfall, provided that the
- 24 replacement does not increase the volume, flow rate, or pollutant load of the discharge, and
- discharges to the same water body at approximately the same location. [This last sentence
- 26 <u>contradicts the first sentence unless you clarify that the "existing outfall" being replaced is</u>
- a non-MS3 outfall. If you meant it to include MS3 outfalls, you need to (1) fix the first
- sentence's statement that a new outfall is one 'constructed at a location where a municipal
- 29 separate discharge did not exist...", and (2) add these words to the end of the last sentence:
- separate discharge and not exist..., and (2) and these words to the cha of the last sentence.
- 30 ", except in cases where environmental permits require replacing an existing structure with
- a different type structure". The replacement of existing structures with different type
- 32 <u>structures where mandated by environmental permits should not be defined as a new</u>
- outfall. This definition must refer only to the structure and not be driven by the change in
- 34 <u>discharge</u>. Outfalls that receive new flows from upstream development should not have
- 35 their status changed. The new flows must be addressed at the point of discharge to the
- 36 MS4 and not at the point of discharge from the MS4. The permittee should not be
- penalized when environmental permits require replacing an existing structure with a
- 38 different type structure or in a different location.]
- 39 "New Stormwater Source" [***Delete this definition consistent with TIER 1 & 2 versions of
- 40 Condition S5 comments/edits***]

1 "New Stormwater Source" [***Edit this definition as shown for use with TEIR 3 & 4 versions of Condition S5 comments/edits***] means any New Development and 2 3 Redevelopment, as defined in Appendix 1 (or in equivalent standards approved by Ecology), that is vested after the effective date of this permit, increases the volume, flow rate, or pollutant load 4 of the stormwater runoff from the site, and discharges to a municipal separate storm sewer 5 6 owned or operated by the Permittee or co-Permittee. 7 "Notice of Intent" (NOI) means the application for, or a request for coverage under this General 8 Permit pursuant to WAC 173-226-200. 9 "Notice of Intent for Construction Activity," and "Notice of Intent for Industrial Activity" mean the application forms for coverage under the Construction Stormwater General Permit and the 10 Industrial Stormwater General Permit. 11 12 "Outfall" means point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the State and does not include open conveyances 13 14 connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances which 15 connect segments of the same stream or other waters of the State and are used to convey waters 16 of the State. 17 "Physically Interconnected" means that one MS4 is connected to a second MS4 in such a way 18 that it allows for direct discharges to the second system. For example, the roads with drainage 19 systems and municipal streets of one entity are physically connected directly to a MS4 belonging 20 to another entity. 21 "Process Wastewater" means any water which, during manufacture or processing, comes into 22 direct contact with or results form the production or use of any raw material, intermediate 23 product, finished product, by product, or waste product. 24 "Qualified Personnel" means someone who has had professional training in the aspects of 25 stormwater management they are responsible for. 26 "Runoff" means that portion of water originating from rainfall and other precipitation that flows 27 over the surface or just below the surface from where it fell and is found in drainage facilities, rivers, streams, springs, seeps, ponds, lakes, wetlands, and shallow groundwater as well as on 28 ground surfaces. see Stormwater. 29 30 "Shared Waterbodies" means waterbodies, including downstream segments, lakes and estuaries, 31 that receive discharges from more than one Permittee. 32 "Site-specific Information" [***Delete this definition consistent with TIER 1 & 2 versions of **Condition S5 comments/edits*****] 33

versions of Condition S5 comments/edits***] includes but is not limited to: means information

"Site-specific Information" [***Edit this definition as shown for use with TEIR 3 & 4

approved or authorized by the Permittee that includes but is not limited to (1) information in water quality management plans such as watershed or stormwater basin plans, TMDLs,

34

35 36

- 1 groundwater management plans, and lake management plans; (2) information about hydrology,
- 2 soils, pollutant sources, or the sensitivity of the receiving waters, or (3) that is information
- 3 obtained through professional field observations, or monitoring, or other studies; and information
- 4 about likely pollutant sources.
- 5 "Stormwater" means that portion of precipitation that does not naturally percolate into the
- 6 ground or evaporate, but flows via overland flow, interflow, pipes and other features of a
- 7 stormwater drainage system into a defined surface waterbody, or a constructed infiltration
- 8 <u>facility.stormwater runoff, snow melt runoff, and surface runoff and drainage.[There has been a</u>
- 9 <u>lack of consistency between permits and other regulations issued by Ecology. The term</u>
- 10 "stormwater" should have one definition across all permits and regulations. This should
- 11 apply to all definitions, terms, acronyms or even concepts generated by Ecology
- 12 irregardless of what law, regulation, or permit the word or term is located.]
- 13 "Stormwater Associated with Industrial Activity" means the discharge from any conveyance
- which is used for collecting and conveying stormwater, which is directly related to
- manufacturing, processing or raw materials storage areas at an industrial plant, and is required to
- have an NPDES permit in accordance with 40 CFR 122.26.
- 17 "Stormwater facilities" means.....
- 18 "Stormwater Management Manual for Western Washington" means the 5-volume technical
- manual (Publication Nos. 05-10-029 through 05-10-033) published by Ecology in February
- 20 2005.
- 21 "Urban/higher density rural subbasin" means any subbasin or portion thereof that is within or
- proposed to be within the urban growth area (UGA), or any rural area subbasin or portion thereof
- 23 fifty percent or more of which is comprised of lots smaller than 5 acres in size.
- 24 "Vesting" means the date, established by local government, that is used to determine which
- development regulations apply to the review of a complete development permit application or
- approved development permit.
- "Waters of the State" includes those waters as defined as "waters of the United States" in 40
- 28 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the
- state" as defined in Chapter 90.48 RCW which includes lakes, rivers, ponds, streams, inland
- 30 waters, underground waters, salt waters and all other surface waters and water courses within the
- 31 jurisdiction of the State of Washington.
- 32 "Water Quality Standards" means Surface Water Quality Standards, Chapter 173-201A WAC,
- 33 Ground Water Quality Standards, Chapter 173-200 WAC, and Sediment Management Standards,
- 34 Chapter 173-204 WAC.

36

[COMMENTS ON THE APPENDICES:]

1	
2 3	[APPENDIX 1: The definition of Maintenance refers to Section 2.2 – There is no section 2.2 in this permit.]
4	
5	[APPENDIX 3: See the attached document]